

A review of the Scenopinidae (Diptera) of Africa south of the Equator and neighboring islands, with descriptions of two new species*

by

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SYNOPSIS

The Scenopinidae of Africa, south of the equator and its neighboring islands, have never been treated in a single reference readily available to entomologists of the area. The fauna presently comprises 31 species, many of which are represented only by the type specimens housed in foreign museums and unavailable for study.

This paper presents provisional keys to the species, illustrations of the key characters of all species, notes on type location, specimens examined and a brief description of key characters. Complete descriptions and illustrations of the two new species, *Scenopinus stuckenbergi* and *Propebrevitrichia quadrispina*, are given.

INTRODUCTION

In 1960 the author began a study of the Scenopinidae of North America which ultimately resulted in the revision of the world fauna (Kelsey, 1969).

In this study all available types of previously described species were examined. Detail drawings of the dissected terminalia of both sexes were made in order that valid characteristics could be found by which to distinguish species. Following the examination of material from Africa, fifteen additional species have been added to the previously recorded sixteen species. Two of the new species are described for the first time in this paper.

The author is indebted to Mr. B. R. Stuckenberg, Natal Museum; Dr. F. Keiser, Naturhistorisches Museum, Basel; Dr. J. P. Doncaster, Keeper, British Museum (Natural History), London; and Dr. A. S. Balachowsky, Director, Museum National d'Histoire Naturelle, Paris, for loaning undescribed material for study. Moreover, the author is indebted to the curators of the various museums housing types for permitting him to dissect and illustrate these, many of which are uniques.

As most types are housed in museums outside of Africa and many potential collectors may not have access to the world monograph, the author has prepared this paper treating those African species found south of the equator. Provisional keys to the species, illustrations of key characters, abbreviated descriptions of key characters of previously described species, notes on type location and specimens examined are given for all material included in this paper. Full descriptions are given for the two new species.

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EXPLANATION OF FIGURES

On the accompanying figures there are two scale markings representing one half millimeter; the shorter is for use with the wings and head, the longer for the enlarged details of the antennae and male and female terminalia.

The illustrations of the male terminalia are of the ninth segment with the associated internal ejaculatory mechanism which consists of an ejaculatory syringe with associated accessory glands and apodemes. The eighth segment which is narrow and ring-like has not been illustrated. The penis is bordered by two aedeagal parameres of various length. On either side of the aedeagus lie a pair of ninth segment claspers which usually are characteristic.

The female eighth sternum often has a characteristic shape or pattern and the roof of the bursal cavity and sternum of the ninth segment are also characteristic for species. Occasionally sclerotized accessory organs, possibly spermathecae, are found which are characteristic and may be useful in identification. Where they have been seen, they are illustrated.

To confirm identification it is necessary to examine the internal genitalia of both sexes.

The author hopes that this paper will arouse interest in African collectors to search for members of this interesting group. To date there has been collecting in only a few areas and none of these has been searched intensively. The 31 species recorded here are believed to be but a mere fraction of the total number expected from this vast area.

At the present time the African fauna of the Scenopinidae is placed in five genera; *Scenopinus* Latreille with three subgroups, *Metatrichia* Coquillett, *Propebrevitrichia* Kelsey, *Prepseudatrichia* Kelsey and *Seguyella* Kelsey.

BIOLOGICAL NOTES

Very little is known of the biology of this interesting family, with the exception of a few basic facts. All known larvae are predaceous on other insects. The best known and most widespread species are *Scenopinus fenestralis* (L.) and *Scenopinus glabrifrons* Meig. whose larvae attack stored products pests and whose adults are collected on windows of houses and museums the world over. Other species have been associated with bird nests, rodent nests, bark beetles, wood-boring beetles and termites.

The majority of species is native to arid or semi-arid areas of the world; almost three-fourths of the North American species inhabit the arid southwest. When present in an area they are generally quite abundant for a short time, sometimes over considerable areas of uniform vegetation, as evidenced by some catches of from 25 to over 100 specimens of a single species.

KEY TO THE GENERA OF SCENOPINIDAE OF AFRICA SOUTH OF THE EQUATOR

- | | |
|---|--------------------------------|
| 1. Cell R_5 open to the tip of the wing | 2 |
| Cell R_5 closed and petiolate | 5 |
| 2. Vein M_{4+Cu} normal, reaching edge of wing | 3 |
| Vein M_{4+Cu} fading just beyond the m crossvein | <i>Seguyella</i> Kelsey |
| 3. Head longer than high, thorax depressed, long slim flies | <i>Prepseudatrichia</i> Kelsey |
| Head higher than long, thorax not depressed, abdomen broad | <i>Scenopinus</i> Latreille 4 |

4. a. Large robust flies with long slender antennae; vein R_4 branching from R_5 before the middle of cell R_5 ; male 9th tergum 4-lobed, female with a large membranous bursal area. (Two Palearctic species which have become world wide in distribution through movement of trade goods) Fenestralis Group
- b. Medium sized flies with variable antennae; vein R_4 branching from near the center of cell R_5 ; male 9th tergum 2-lobed, open above, female bursal area generally as in Fenestralis group but somewhat wider than long Albicinctus Group
- c. Medium sized flies with pear-shaped antennae; vein R_4 branching from near center of cell R_5 ; vein M_{1+2} parallel to vein R_5 , ending behind wing tip; male 9th tergum with basal portion extending ventrally, open distally; female 8th sternum, longer than tergum, 9th tergum usually with short spines, bursal cavity longer than wide Brevicornis Group
5. Very large robust flies with abdomen broad in both sexes; frontal area swollen so that antennae project from middle of head; hairs often flat, scale-like

Metatrichia Coquillett

Small flies with pollinose scales on thorax; abdomen long and slender; male with 9th tergum as two elongate plates covering the genitalia, female with elongate 8th sternum and a row of spines on 9th tergum **Propebrevitrichia** Kelsey

KEYS TO SPECIES

Genus *Scenopinus* Latreille

1802 *Hist. Nat. Crust. Ins.* 3, p. 463.

For the synonymy of the genus the reader is referred to Kelsey (1969) for the complete listing.

Type-species, *Musca fenestralis* Linneaus (mon.)

The genus is the largest, and by far the most cosmopolitan, having representatives in all geographic regions. Because of its size (127 species) it has been divided into four infrageneric groups, each with rather distinct continental distribution. The area covered by this paper contains twenty-three species in three of the four infrageneric groups.

Fenestralis Group

This group, which is properly Palaearctic in distribution, is included in the Scenopinid fauna south of the equator because of the worldwide distribution of *S. fenestralis* (L.) and *S. glabrifrons* Meig.

The members of this group of moderately large flies are characterized by a head that is higher than long and which generally bears long slender antennae. In the wing R_4 branches from R_5 at or before the middle of cell R_5 . The males have in common a four-lobed 9th tergum and a three-pronged genital apparatus consisting of a median aedeagus and two lateral aedeagal parameres. The females of this group have a large membranous bursal area (see figures).

Albicinctus Group

The members of this group are characterized by having the head higher than long, the antennae only twice as long as wide, the vein R_4 branching from near to or beyond the middle of cell R_5 , and a size generally smaller than that of the Fenestralis Group.

The males are characterized by a bilobed 9th tergum which does not overlap or close on the ventral side (dorsal on the specimen) leaving the genitalia exposed. The aedeagus is variable, with parameres often longer than the aedeagus proper. The bursa of the female is somewhat wider than long, otherwise it generally is as in the *Fenestralis* Group.

Brevicornis Group

The members of this group have the head higher than long and the antennae generally pear-shaped. The wing has R_4 branching from R_5 at or near the middle of the cell and vein M tends to run parallel to R_5 so that these veins are widely separated at the wing margin. The male 9th tergum, though open, has the proximal portion extending ventrally to partially cover the venter.

In the female the 8th sternum extends posteriorly beyond the margin of the 8th tergum, the 9th tergum has randomly placed coarse hairs and the bursal cavity is longer than wide.

Key to the Fenestralis Group

- | | |
|---|---------------------------|
| 1. Males; frons triangular, eyes divided into coarse upper and finer lower facets | 2 |
| Females; frons broad, eyes with uniform facets | 3 |
| 2. Frons shining, protruding; halter knob white; dorsal lobe of 9th tergum smoothly rounded | glabrifrons Meigen |
| Frons rugose, flat; halter knob variable, brown to white; dorsal lobe of 9th tergum notched ventrally | fenestralis (L.) |
| 3. Frons broad, shining; halter knob white | glabrifrons Meigen |
| Frons broad, rugose; halter knob variable, brown to white | fenestralis (L.) |

Key to the Albicinctus Group

- | | |
|---|--------------------------|
| 1. Males | 2 |
| Females | 4 |
| 2. Halter knob white; abdomen with one white band | 3 |
| Halter knob with base red-brown, remainder white; no white stripes on abdomen (Madagascar) | anthrax Kelsey |
| 3. Antenna black-brown; abdomen with one white band; aedeagal parameres slender (Seychelles) | balteatus Lamb |
| Antenna brown darkening distally, abdomen with one narrow white band, aedeagal parameres antler-like (Mozambique) | inquelinus Ségué |
| 4. Wing hyaline | 5 |
| Wing brown | 11 |
| 5. Halter knob white or wholly or partly cream | 6 |
| Halter knob tan, brown or black-brown | 8 |
| 6. Halter knob cream or partly so | 7 |
| Halter knob white | 10 |
| 7. Halter knob cream above, white below, antennae brown (Madagascar) | keiseri Kelsey |
| Halter knob cream, antennae black (Fr. Congo) | bouveri Ségué |
| 8. Halter knob brown or black-brown | 9 |
| Halter knob tan dorsally, whiter ventrally, antenna orange at base darkening at tip (Sierra Leone to East Africa) | brunneus (Kröber) |

9. Halter knob brown, antennae brown darkening distally (Zambezi, Rhodesia) **inquelinus** Séguy
 Halter knob black-brown above, white below, antennae black-brown (S. Africa) **angustifrons** (Kröber)
 Halter knob light brown; antennae with basal segments red-orange, third segment black; frons very broad (Kenya) **flavipes** (Kröber)
10. Antennae red-brown; frons flat, wide, shining (Cameroons and N.W. Rhodesia) **gromieri** Kelsey
 Antennae black-brown; frons narrow, rugose (Seychelles) .. **balteatus** Lamb
11. Halter knob red-brown or base of knob red-brown with remainder white .. 12
 Halter knob wholly or partially brown or black 15
12. Halter knob red-brown 13
 Halter knob with base of knob red-brown, remainder white (Madagascar-Mozambique) **anthrax** Kelsey
13. Halter knob red-brown, shining; antennae orange, darkening at tip; palpus broad and paddle-like (S. Africa, Natal) **palmulapalpus** Kelsey
 Halter knob red-brown, dull; antennae red-brown, palpus normal 14
14. Frons widening dorsally; cell R_5 narrowing at tip (N. Rhodesia) **evansi** Kelsey
 Frons widening ventrally; cell R_5 nearly uniformly wide throughout (S. Africa) **katbergi** Kelsey
15. Halter knob brown, antennae dark; mouthparts normal 16
 Halter knob black-brown, antennae yellow; mouthparts atrophied (Kenya) **aethiopicus** (Lindner)
16. Halter knob brown above, cream below antennae orange basally, darkening distally; cell R_5 parallel-sided (Madagascar) **madagascariensis** Ender.
 Halter knob brown; antennae black; cell R_5 broad, vein M_{1+2} ending in tip of wing (Africa?) **oldenbergi** (Kröber)

Key to the Brevicornis Group

1. Males 2
 Females 5
2. Wings smoky white 3
 Wings smoky brown. (Aldabra Island) **fryeri** Kelsey
3. Halter knob white; antennae red-brown or black 4
 Halter knob red-brown; antennae yellow-brown (Cape Prov., S. Africa) **turneri** Kelsey
4. Antennae dark red-brown; vein M_{1+2} ending in tip of wing; cell R_5 parallel-sided (S. Africa) **stuckenbergi** n. sp.
 Antennae black; vein M_{1+2} ending before tip of wing; cell R_5 constricted beyond vein R_4 (Madagascar) **minusculus** Séguy
5. Wings brown or smoky brown 6
 Wings white or smoky-white; halter knob white; antennae black; 8th sternum short (Madagascar) **minusculus** Séguy
6. Halter knob wholly or partially tan; antennae black-brown 7

- Halter knob white; antennae dark red-brown; cell R_5 parallel sided; M_{1+2} ending at tip of wing (S. Africa) **stuckenbergi** n. sp.
7. Halter knob tan, velvety, white below; antennae velvety; cell R_5 constricted at tip by R_5 dipping down toward M_{1+2} (Madagascar) **reduncus** Kelsey
- Halter knob tan, antennae not velvety; cell R_5 curving sharply anteriorly, vein M_{1+2} ending well before tip of wing (Madagascar) **lincinus** Kelsey

The Genus *Seguyella* Kelsey

Kelsey, 1969. *Bull. U.S. Nat. Mus.* 277: 296.

Type-species *Omphrale galactica* Séguy.

The genus *Seguyella* resembles the genus *Scenopinus* but differs in the venation of the wing, male and female terminalia, and in having a notched third antennal segment. Vein R_5 extends straight from the cross-vein to before the tip of the wing and vein M_{1+2} runs parallel, or slightly diverging, to end in the wing margin well behind the tip of the wing. Vein $M_3 + Cu_1$ short or missing beyond the *m* crossvein.

Key to the African species of *Seguyella*

1. Males; eyes contiguous along midline, wings hyaline 2
 Females; eyes separated by a broad frons; wings brown; thorax red-brown pollinose; halter knob tan pollinose; abdomen red-brown granular (S. Africa) **turneri** Kelsey
2. Halter knob brown, elongate; abdomen with dorsal portion of segments 3–7 white; terminalia black (Kenya) **galactica** Séguy
 Halter knob red-brown, shining, rounded; abdomen with dorsal portion of third segment red-brown, segments 4–7 white; terminalia red-brown (S. Africa) **turneri** Kelsey

Genus *Prepseudatrichia* Kelsey

Kelsey, 1969. *Bull. U.S. Nat. Mus.* 277: 286.

Type species, *Prepseudatrichia mateui* Kelsey.

The genus *Prepseudatrichia* is most interesting in that its wing is typical of *Scenopinus*, while there is a bodily resemblance to the North American *Pseudatrichia* in that the head is longer than high and the thorax is flattened dorso-ventrally. The terminalia of both sexes are distinctive, separating them from the above groups. Members of this genus have been reared from burrows of wood-borers attacking *Acacia* and *Sterculia* trees.

Only one species has been seen from south of the equator, a single female from Mozambique; however, six specimens reared from *Acacia*, in as many areas of the Sahara region, i.e. from Beni Abbes, W. Algeria; Temba, Sahara; Oued el Arfejd, Sahara, Occ.; to N. Chad (2) have been seen. The terminalia of the type male are included for illustration of the opposite sex.

Genus *Metatrichia* Coquillett

Coquillett, 1900. *Ent. News* 11: 500.

Type species, *Scenopinus bulbosus* Osten Sacken (orig. des.) 1877, *Bull. U.S. Geol. Geog. Survey Terr.* 3: 275.

The genus *Metatrichia* Coquillett contains large robust flies with broad, flat, blunt

Key to African species of Metatrachia

- Genus
- Propebrevitrichia*
- Kelsey

Type species *Propebrevitrichia turneri* Kelsey.

The genus *Propebrevitrichia* closely resembles the genus *Brevitrichia* of North America and *Heteromphrale* of South America. It differs from these two genera in the branching of R_4 from beyond the middle of cell R_5 , rather than from the base. The females of *Propebrevitrichia* and *Heteromphrale* agree quite closely in the elongate 8th sternum; all three genera have spines on the 9th tergum. In all other characters the agreement of the three genera is quite close.

Key to the species of Propebrevitrichia

1. Males 2
Females 3
2. Head black-brown, frons dusted grey pollinose; thorax black-brown dusted grey pollinose; halter white; abdomen dark red-brown dusted grey pollinose; 9th tergite with basal third dark, remainder white with two dark spots; all dusted grey pollinose (S. Africa) **stuckenbergi** Kelsey
Head brown, frons covered with light brown scales; thorax red-brown covered with golden brown scales, bordered on either side of the midline by two brown bands; halter knob white; abdomen red-brown covered with tan scales, half of segments 2 and 3 white, remainder of tergites white dorsally except 9th which has the basal portion brown, covered with brown scales and remainder white (S. Africa) **turneri** Kelsey
3. Head red-brown, frons broad, swollen, with scattered hairs, genal portion yellow; thorax red-brown covered with golden brown scales bordered on either side of the midline by two brown bands; halter knob white; abdomen red-brown covered with tan scales; tergites 1 to 5 with white posterior bands; 8th sternum elongate, orange-red, exceeding the dorsum; 9th tergum with 3 stiff spines (S. Africa) **turneri** Kelsey
Head orange, frons broad, widening dorsally; thorax black-brown dusted with grey

and olive pollen, areas above humeral callus and lower margins of tergum orange; halter knob yellow-orange; abdomen dark red-brown, subshining, very long, 8th sternum dark red-brown, tip yellowish; 9th tergum with 4 black spines (S. Africa)

quadrispina new species

DESCRIPTIONS OF SPECIES

Genus *Scenopinus*

Fenestralis Group

1. *Scenopinus fenestralis* (Linnaeus)

(Figure 1)

Musca fenestralis Linnaeus 1758. *Systema Naturae Per Regna Tria Naturae*. Ed. 10, 1: 597.

This species is characterized by the rugose frons in both sexes, long, slender and dark brown antennae and yellow-brown legs. The halteres vary from white to dark brown. The male terminalia have a notch at the tip of the dorsal lobe that shows considerable variation; see figure 1m.

Length: Male body 4–4,5 mm, wing 3 mm; female body 4,5–5,5 mm, wing 3,5–3,7 mm.

Type locality: Europe—type specimen lost.

Distribution: World-wide.

2. *Scenopinus glabrifrons* Meigen

(Figure 2)

Scenopinus glabrifrons Meigen 1824. *Systematische Beschreibung* 4, p. 119.

These are large flies similar to *S. fenestralis* but are easily separated on the basis of the shining frontal areas of both the male and the female. Antennae elongate, orange-brown at the base darkening at the tip; halteres white; male 9th tergum with smooth margins; female 8th sternum and bursa with minor characters; see figures.

Length: Male 4–4,5 mm, wing 3 mm; female body 4,5–5,5 mm, wing 3,5–3,7 mm.

Type locality: Europe—type specimen lost.

Distribution: World-wide.

African material seen: 1 female S. Africa, Cape Town, Sea Point, Dec. 10–16, 1950.

Albicinctus Group

3. *Scenopinus aethiopicus* (Lindner)

(Figure 3)

Omphrale aethiopicus Lindner 1955. *Jahr. Ver. vaterl. Naturk. Wurttemberg* 110: 20.

Though described as male, both specimens referred to are females, the type has *atrophied*, apparently normal, mouthparts; frons with an elongate depression above the antennae reaching over one-third the distance to the ocellar triangle; halter rounded at the apex.

Male: Unknown.

Length: Female body 3–4 mm.

Type locality: Kisangara, Kenya, December 31, 1951 or January 1, 1952 (D. O. Africa Exp.).

Type deposited in Staatliches Museum für Naturkunde, Stuttgart, Germany.

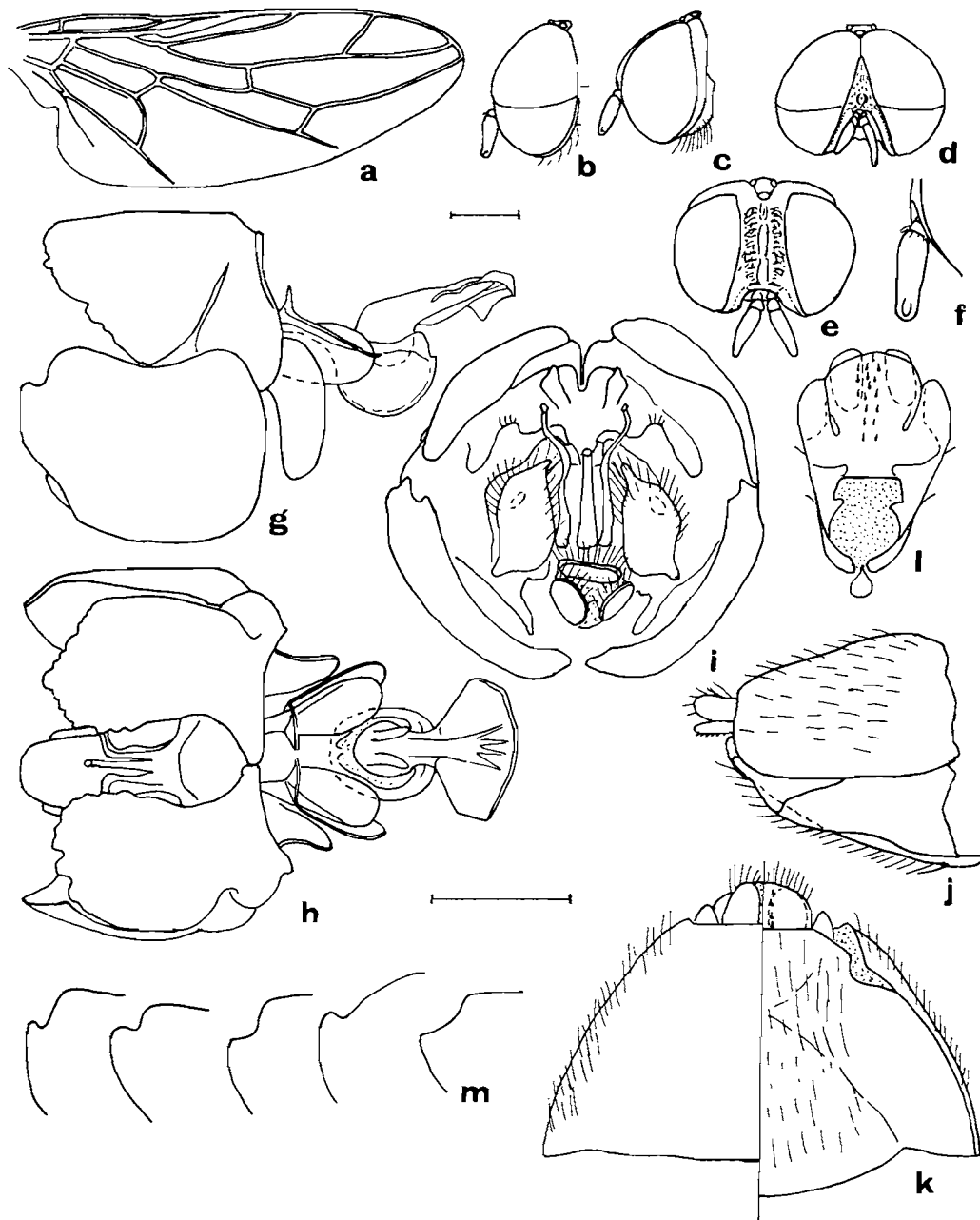


Fig. 1. *Scenopinus fenestralis* (Linnaeus), male and female.

a. wing, b. c. lateral aspects of male and female heads, d. e. frontal aspects of male and female heads, f. enlarged detail of antenna, g. h. i. lateral, ventral (physically dorsal) and posterior aspects of male terminalia, j. lateral aspect of female 8th segment, k. dorsal (left) and ventral (right) aspects of 8th segment, l. 9th sternum and roof of bursa, m. outlines of various emarginations of male 9th tergum.

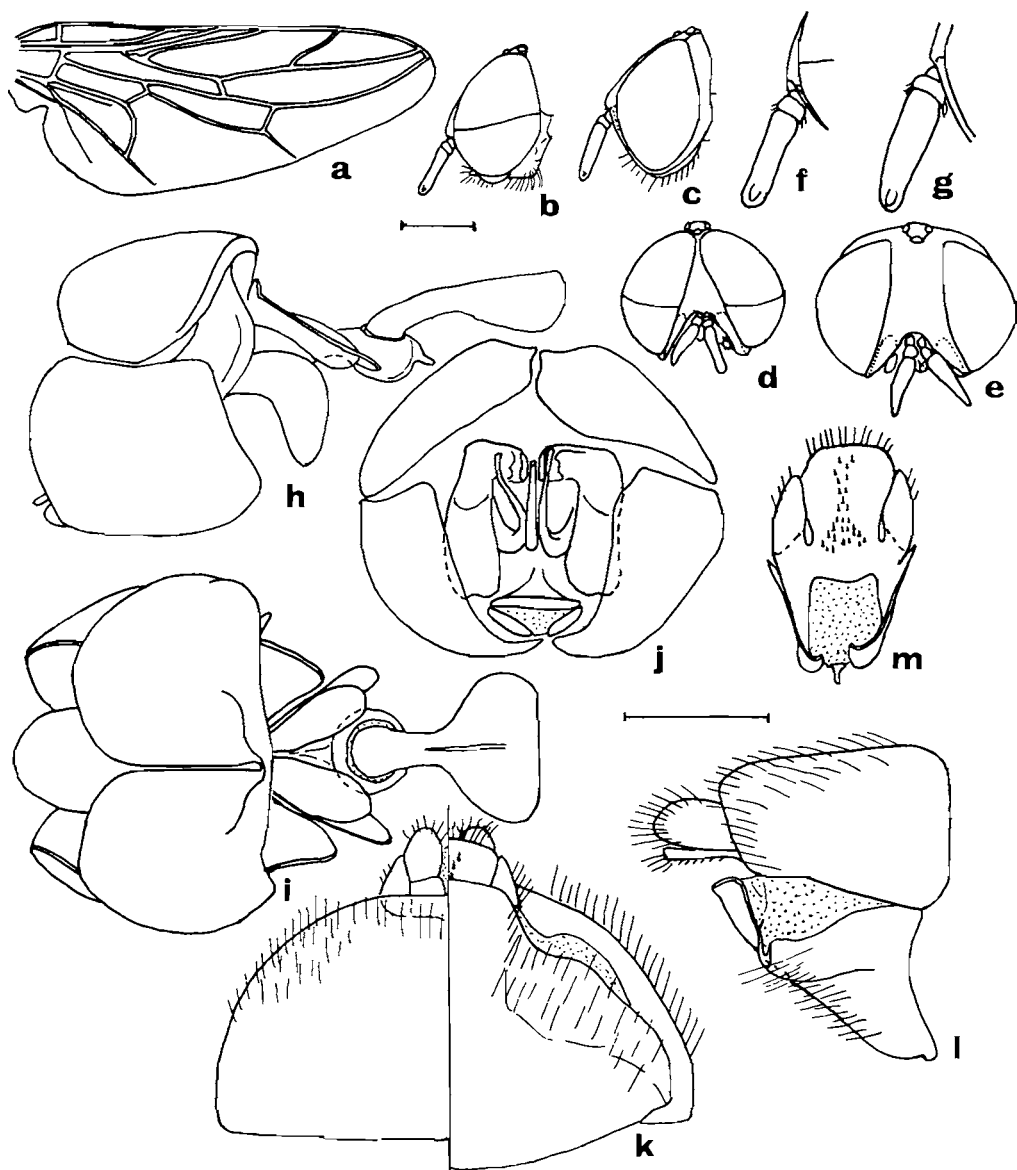


Fig. 2. *Scenopinus glabrifrons* Meigen, male and female.
 a. wing, b. c. lateral aspects of male and female heads, d. e. frontal aspects of male and female heads, f. g. enlarged details of male and female antennae, h. i. j. lateral, ventral (physically dorsal) and posterior aspects of male terminalia, k. dorsal (left) and ventral (right) aspects of female 8th segment, l. lateral aspect of female 8th segment, m. 9th sternum and roof of bursa.

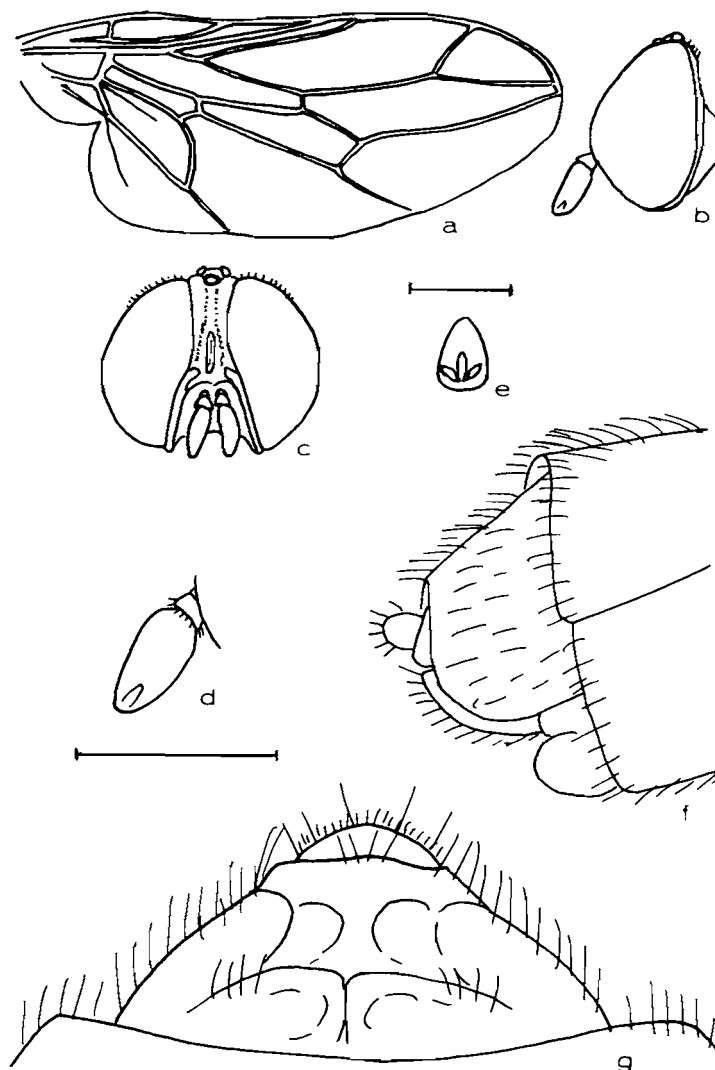


Fig. 3. *Scenopinus aethiopicus* (Lindner), female.
 a. wing, b. c. lateral and frontal aspects of head, d. enlarged detail of
 antenna, e. sketch of atrophied mouthparts, f. g. lateral and ventral aspects
 of undissected terminalia.

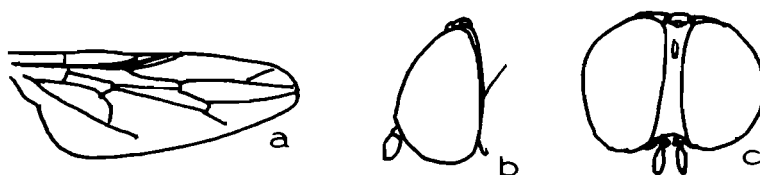


Fig. 4. *Scenopinus angustifrons* (Kröber), female.
a. wing, b. c. lateral and frontal aspects of head. Figures after Kröber (1913).

4. *Scenopinus angustifrons* (Kröber)

(Figure 4) (after Kröber)

Omphrale angustifrons Kröber, 1913. *Ann. Mus. nat. Hung.* 11: 184.

The type of this specimen has been lost and no specimen agreeing with it has been seen.

Female: Frons narrow, antennae dark brown, the third segment short, oval; halter dark brown, the base of the knob whitish, wing hyaline.

Male: Unknown.

Length: Female body 5,5 mm.

Type locality: Willowmore, Cape Prov., South Africa, December 1.

Type deposited: Hungarian National Museum (destroyed).

5. *Scenopinus anthrax* Kelsey

(Figure 5)

Scenopinus anthrax Kelsey 1969. *Bull. U.S. Nat. Mus.* 277: 51.

Male: Wings hyaline; halter stem red-brown, knob white with red-brown base; legs with red-brown femora and tibiae; first tarsal segment red-brown, 2-4 orange, 5 red-brown; abdomen without white bands.

Female: Wings brown-fumose; halter stem brown, knob red-brown with a brown pollinose bloom; legs with femora and tibiae red-brown, tarsi orange-brown, except last segment dark.

Length: Male body 3,2-3,8 mm, wing 2,4-2,6 mm; female body 3,2-4,5 mm, wing 2,3-3,2 mm.

Type locality: Bekily, Reg. Sud de l'Ile, Madagascar, March, 1933 (A. Seyrig).

Holotype: Male deposited in Muséum National d'Histoire Naturelle, Paris.

Allotype: Female, Vila Pery, Mozambique, November 24, 1928 (P. Lesne) (MNHN) Paris.

Paratypes: Male and female copulatory pair, same data as type except April 1938, 1 female, October 1936, 1 female, Plaines de Fiherera, 1905 (G. Geay) all in (MNHN), Paris. Two females, Madagascar Nord, Montagne d'Ambre, 1 000 m, dct. Diego-Suarez, November 23-December 4, 1957 (B. Stuckenberg), in Natal Museum.

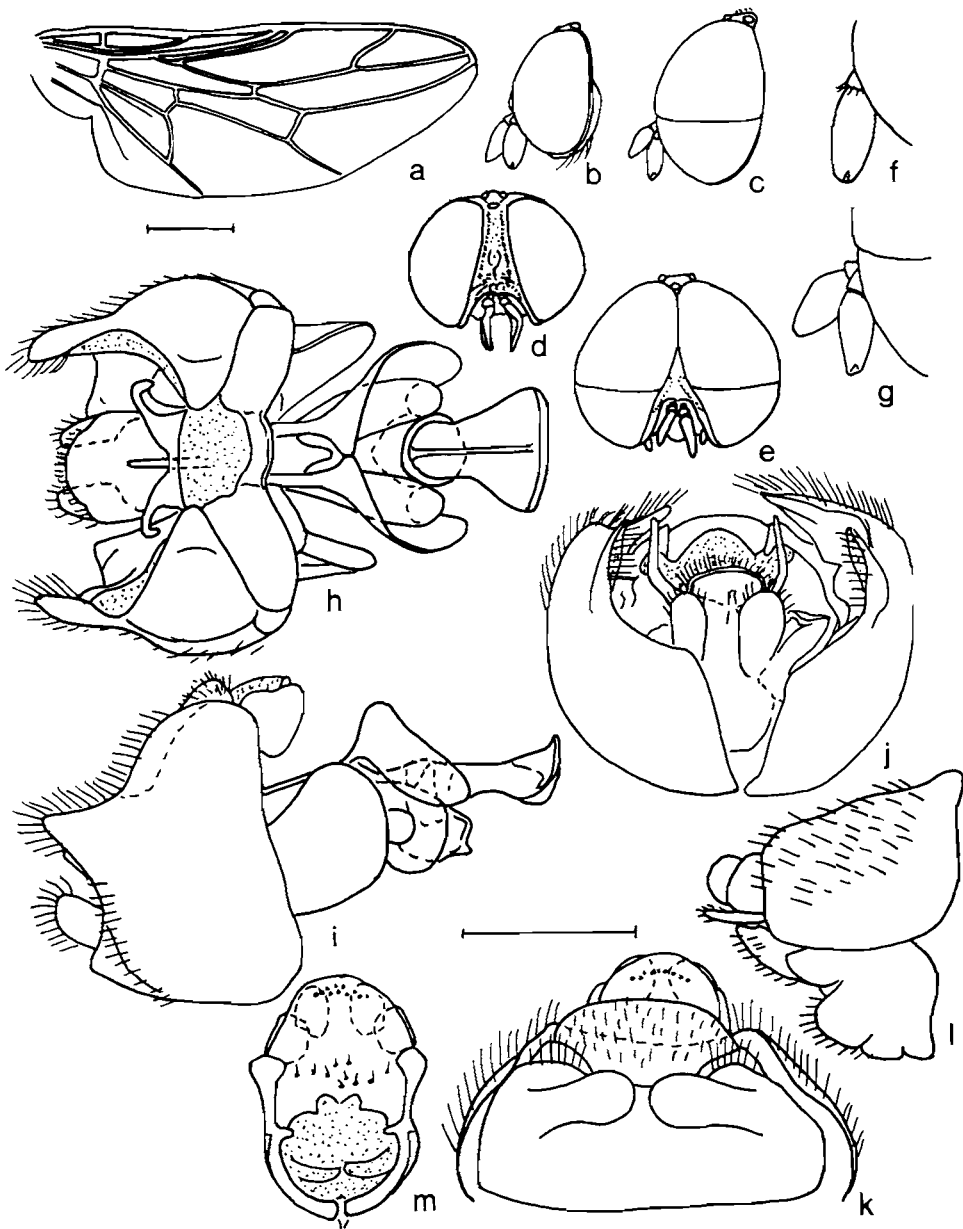


Fig. 5. *Scenopinus anthrax* Kelsey, male and female.

a. wing, b. c. lateral aspects of female and male heads, d. e. frontal aspects of female and male heads, f. g. enlarged details of female and male antennae, h. i. j. ventral, lateral and posterior aspects of male terminalia, k. ventral aspect of female 8th sternum, l. lateral aspect of female 8th segment, m. 9th sternum and roof of bursa.

6. *Scenopinus balteatus* Lamb

(Figure 6)

Scenopinus balteatus Lamb 1922. *Trans. Linn. Soc. London* 18: 363.

Male: Characterized by a smooth, sword-shaped central ridge on the frons, a single white band on the abdomen and by the shape of the terminalia; halter knob tan; wings hyaline.

Female: May be recognized by the configuration of the 8th sternum and bursa; halter knob white; wings clear.

Length: Male body 3 mm, wing 2 mm; female body 3,7 mm, wing 2,7 mm.

Type locality: Mahe, Cascade Estate, 240–450 m, Seychelles (Percy Sladen Exp.).

Types deposited in British Museum (Natural History).

7. *Scenopinus bouvieri* (Séguy)

(Figure 7)

Omphrale bouvieri Séguy 1920. *Bull. ent. France*: 317.

Female: This species is quite similar to *S. balteatus* Lamb, but differs in details of the frons, the shorter length of the median crossvein and in details of the 8th sternum. The bursae have similar configurations but differ in minute details.

The type was taken in Paris from the nest of a pigeon. A specimen examined from Loango, French Congo, agrees in all details with the type. The agreement in the shape of the bursal cavity with the Albicintus Group would suggest that this species is primarily African in affinities.

Male: Unknown.

Length: Female body 3,5 mm, wing 2,5 mm.

Type locality: Paris (? introduced from Africa).

Type deposited in Muséum National d'Histoire Naturelle, Paris.

Material examined: Female, Loango, Foêrt du Mayombe, Congo Brazzaville, 1911 (Vodon) (MNHN) Paris.

8. *Scenopinus brunneus* (Kröber)

(Figure 8)

Omphrale brunnea Kröber 1913. *Ann. Mus. nat. Hung.* 11: 192.

Female: This species, described originally from East Africa, appears to be distributed across equatorial Africa from the Indian Ocean to the Atlantic. The type specimen is teneral and a good deal smaller than average.

The ground color of the other specimens is black or black-brown. The antennae are colored as follows: first segment brown; second brown-orange; third brown-orange at base darkening to black-brown distally. Halter knob tan dorsally, white ventrally. Front and middle legs black-brown, with first four tarsal segments yellow-brown; and last segment red-brown; hind legs with tarsi entirely red-brown.

Male: Unknown.

Length: Female body 3–4,5 mm, wing 2,2–3 mm.

Type locality: Waboniland, East Africa.

Type deposited in Naturhistorisches Museum, Vienna.

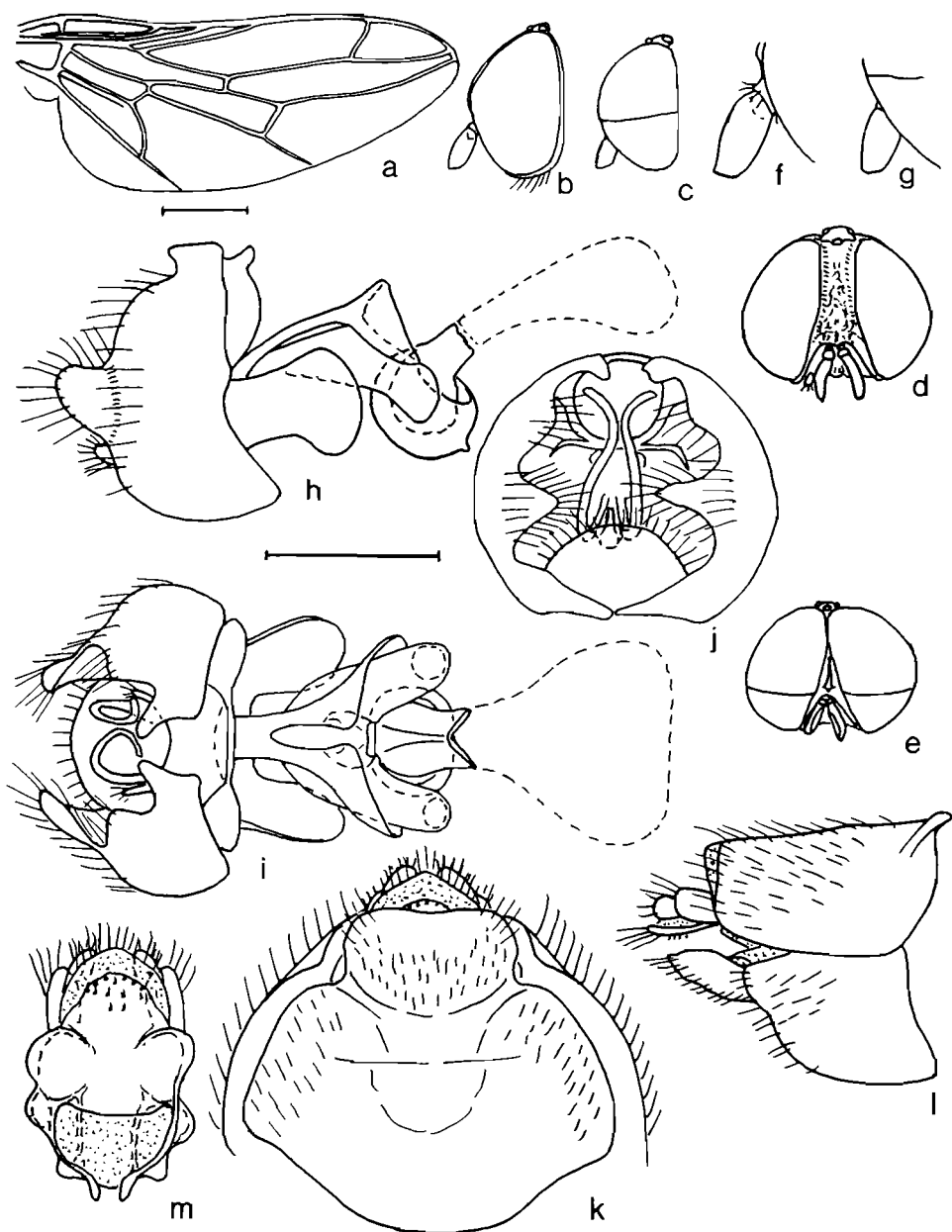


Fig. 6. *Scenopinus balteatus* Lamb, male and female.

a. wing, b. c. lateral aspect of female and male head, d. e. frontal aspect of female and male head, f. g. enlarged detail of female and male antennae, h. i. j. lateral, ventral and posterior aspects of male terminalia (broken ejaculatory syringe indicated by dashed lines), k. ventral aspect of female 8th sternum, l. lateral aspect of female 8th segment, m. female 9th sternum and roof of bursa.

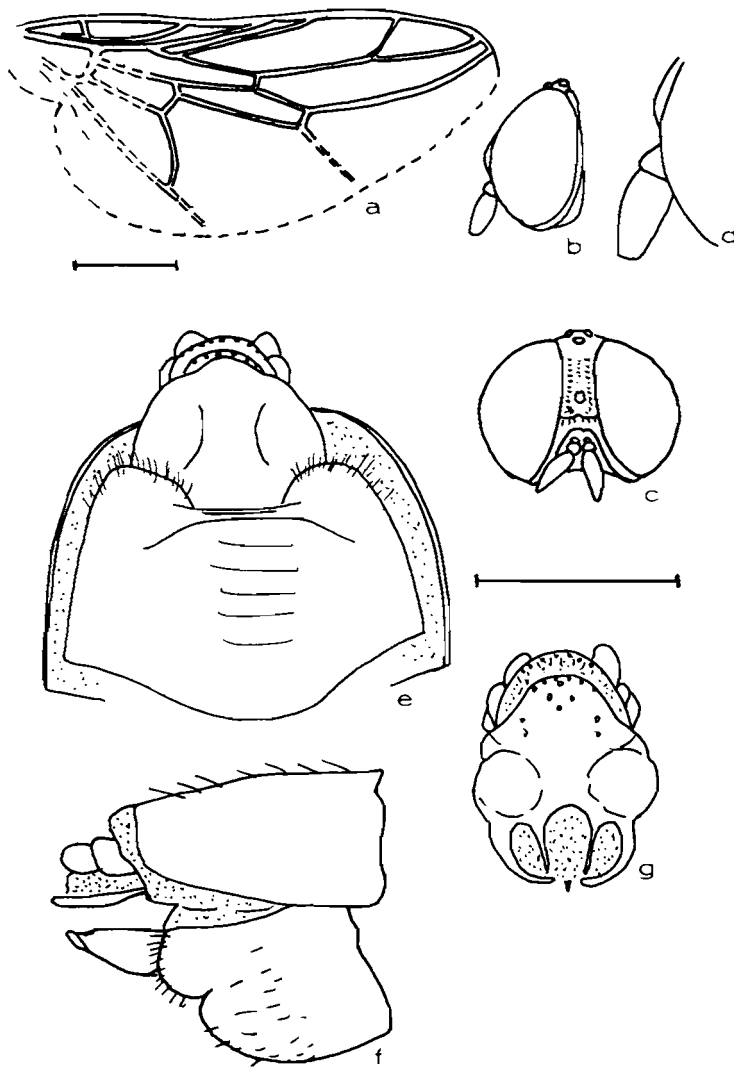


Fig. 7. *Scenopinus bouvieri* (Séguy), female.
 a. wing, b. lateral aspect of head, c. frontal aspect of head, d. enlarged detail of antenna, e. ventral aspect of 8th sternum, f. lateral aspect of 8th segment, g. 9th sternum and roof of bursa.

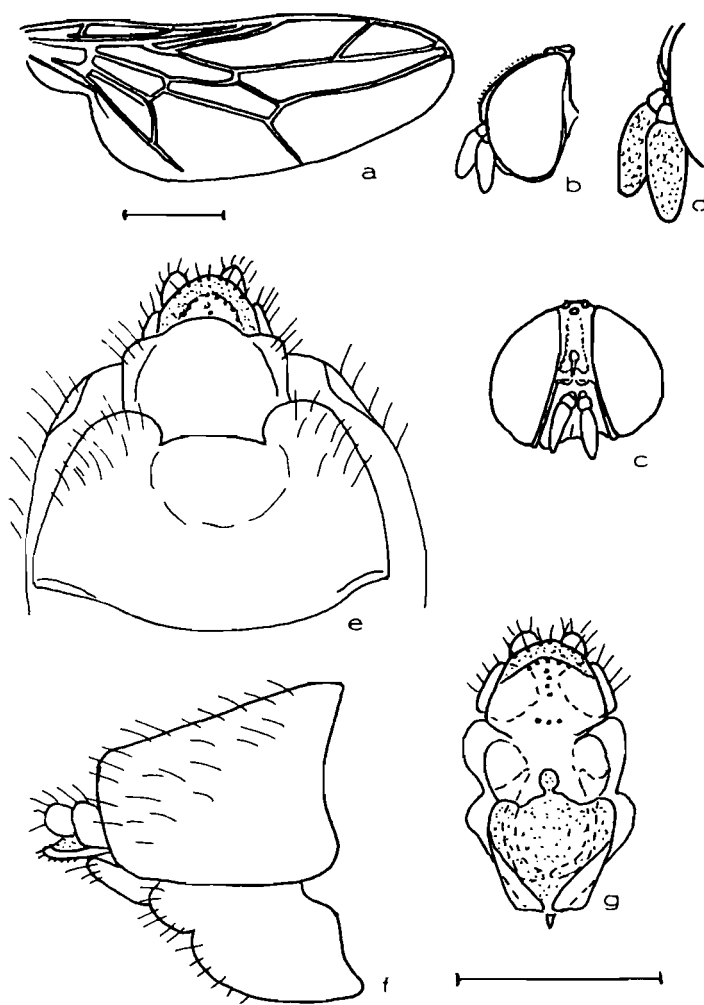


Fig. 8. *Scenopinus brunneus* (Kröber), female.
 a. wing, b. lateral aspect of head, c. frontal aspect of head, d. enlarged detail of antenna, e. ventral aspect of 8th sternum, f. lateral aspect of 8th segment, g. 9th sternum and roof of bursa.

Material examined: 1 female, Njala, Sierra Leone, 1926. (E. Hargreaves) in Zoological Museum of the University, Helsinki. 1 female, Lihete Sllomele, Congo Belge, July 1936 (J. Chesquiere) in Institut Royal des Sciences Naturelles de Belgique, Brussels; 4 females, Njala, Sierra Leone, 1926, March 1936, April 1936 (E. Hargreaves); Moramba, Sierra Leone, February 27, 1925 (E. Hargreaves); 1 female, Laboratory, Accra, Gold Coast, March 1920 (J. W. S. Macfie); 1 female, Bembay, Senegal, February 1940 (J. Risbee); 1 female, Cico, Nyasaland, April 1916 (R. C. Wood); 1 female, Chipinda Pools, Rhodesia

(Lower Lundi R.) October 23, 1960 (R. Goodier) all in British Museum (Natural History) London; 2 females, Ndumu Reserve, Ingwavuma District, Tongaland, S. Africa, December, 1-10, 1963 (B. & P. Stuckenberg), in Natal Museum.

9. *Scenopinus evansi* Kelsey

(Figure 9)

Scenopinus evansi Kelsey 1969. *Bull. U.S. Nat. Mus.* 277: 66.

Female: Antennae red-brown, third segment oval two-and-a-half times as long as wide; wings brown-fumose; halter stem brown, knob red-brown, shining; legs with coxae through tibiae red-brown, tarsi orange.

Male: Unknown.

Length: Female body 3,5 mm, wing 2,9 mm.

Type locality: N. Rhodesia (Sylvester Evans).

Type deposited in British Museum (Natural History), London.

Paratypes: 4 females, Ruvo, Malawi, April 14, 1916 (R. C. Wood); 2 Ruvo, Malawi, April 29, 1916 (R. C. Wood), all in British Museum.

10. *Scenopinus flavipes* (Kröber)

(Figure 10)

Omphrale flavipes Kröber 1939. *Ann. Mag. nat. Hist.* (11) 3: 398.

Female: This species is known only from the type. Frons three times as tall as broad, dull, with fine pale yellow hairs; antennae with first two segments red-orange with golden hairs, third segment black. Halter entirely light brown; wings clear.

Male: Unknown.

Length: Female body 3 mm, wing 2,3 mm.

Type locality: Rabai, Kenya, August 1930 (Van Someren).

Type deposited in British Museum (Natural History), London.

11. *Scenopinus gromieri* Kelsey

(Figure 11)

Scenopinus gromieri Kelsey 1969. *Bull. U.S. Nat. Mus.* 277: 70.

Female: Reminiscent of *S. glabrifrons*, but smaller; frons broad, shining; antennae red-brown, third segment oval; wings hyaline, dusted with brown; halter stem brown, knob white. Legs with front coxa and femur straw colored, tibia orange-brown, tarsi red-brown; middle legs with coxae to femora straw-colored, remainder red-brown; hind legs all red-brown.

Male: Unknown.

Length: Female body 3,3-4,2 mm, wing 3,5-3,7 mm.

Type locality: Cameroon N. O., Plateau de Ochany, 1 500 m, Saison Sèche, November 1, 1942 (Dr. Gromier).

Holotype: Female deposited in Muséum National d'Histoire Naturelle, Paris.

Paratypes: 3 females, Chilanga, N.W. Rhodesia; 2 females, October 4, 1913, in grain

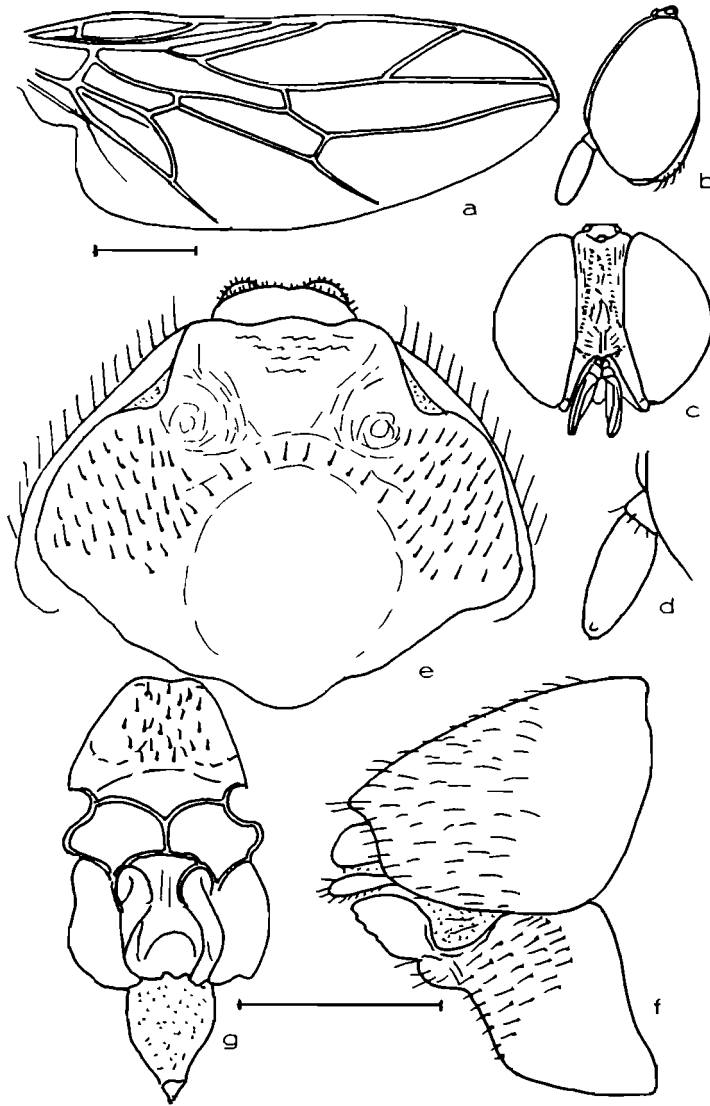


Fig. 9. *Scenopinus evansi* Kelsey, female.

a. wing, b. lateral aspect of head, c. frontal aspect of head, d. enlarged detail of antenna, e. ventral aspect of 8th sternum, f. lateral aspect of 8th segment, g. 9th sternum and roof of bursa.

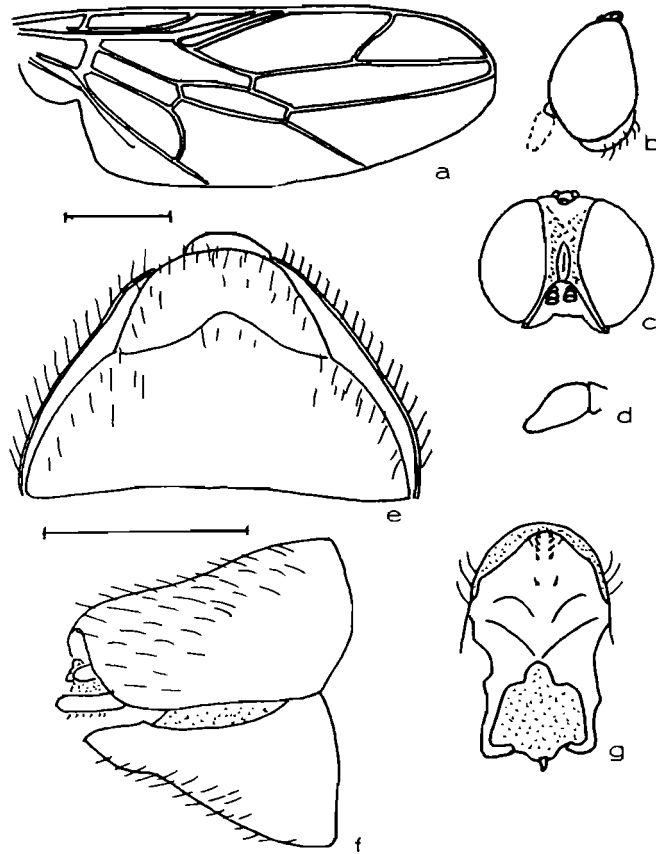


Fig. 10. *Scenopinus flavipes* (Kröber), female.

a, wing, b, lateral aspect of head, c, frontal aspect of head, d, detail of third antennal segment (after Kröber), e, ventral aspect of 8th sternum, f, lateral aspect of 8th segment, g, 9th sternum and roof of bursa.

store in house; 1 female November 20, 1913, on window in house (R. C. Wood); in British Museum (Natural History), London.

12. *Scenopinus inuelinus* Séguy (Figure 12)

Scenopinus inuelinus Séguy 1931. *Bull. Mus. Hist. nat. Paris* 3: 113.

Male: This medium-sized fly is easily distinguished in the male by the white halter knob, single white band on the abdomen, the antler-like shape of the male aedeagal parameres, and the shape of the 9th tergum.

Female: The female has a brown halter knob, but can only be positively identified by the shape of the bursal cavity. Larvae of this species have been found in *Polyporus* in June and July, and adults in July.

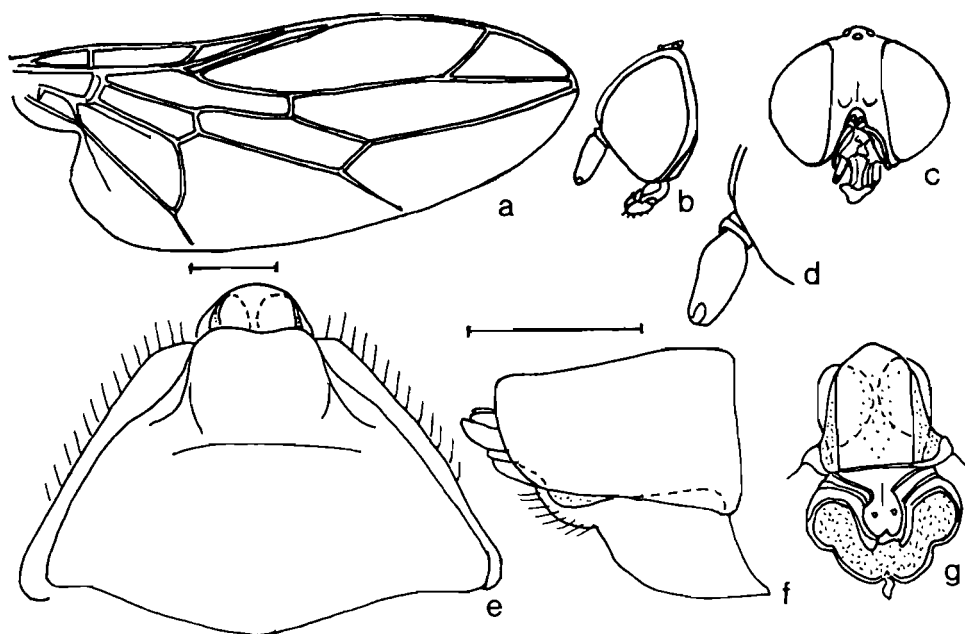


Fig. 11. *Scenopinus gromieri* Kelsey, female.
a. wing, b. lateral aspect of head, c. frontal aspect of head, d. enlarged detail of antenna, e. ventral aspect of 8th sternum, f. lateral aspect of 8th segment, g. 9th sternum and roof of bursa.

Length: Male body 3,3 mm, wing 2,3 mm; female body 3,75 mm, wing 2,5 mm.

Type locality: Zambezi, Nova Coupanga pres Chemba, August 24, 1929 (P. Lesne), a copulating pair.

Type deposited in Muséum National d'Histoire Naturelle, Paris.

Material examined: 1 male, 3 females, same data as type except July 5 and July 23, 1 female, Vila Pery, Zambezi, November 24 (P. Lesne) all in Muséum National d'Histoire Naturelle, Paris; 1 female, Luabo, Mozambique, June and July 1957 (Usher and Stuckenberg); 1 female Trelawney, Rhodesia, December 14, 1952 (N. J. Myers), in Natal Museum.

13. *Scenopinus katbergi* Kelsey (Figure 13)

Scenopinus katbergi Kelsey 1969. *Bull. U.S. Nat. Mus.* 277: 72.

Female: A moderately large fly with first antennal segment short, black-brown, second reddish brown, third red-brown, elongate oval, half again as long as wide; wings brown with brown veins, appearing to have veins R_2 as well as R_3 , and R_4 branching from basal third of cell R_5 ; halter knob red-brown; legs with femora to tibiae red-brown, fore tarsus orange-brown, middle and hind tarsi straw-colored. 8th segment broken, so could not be illustrated.

Male: Unknown.

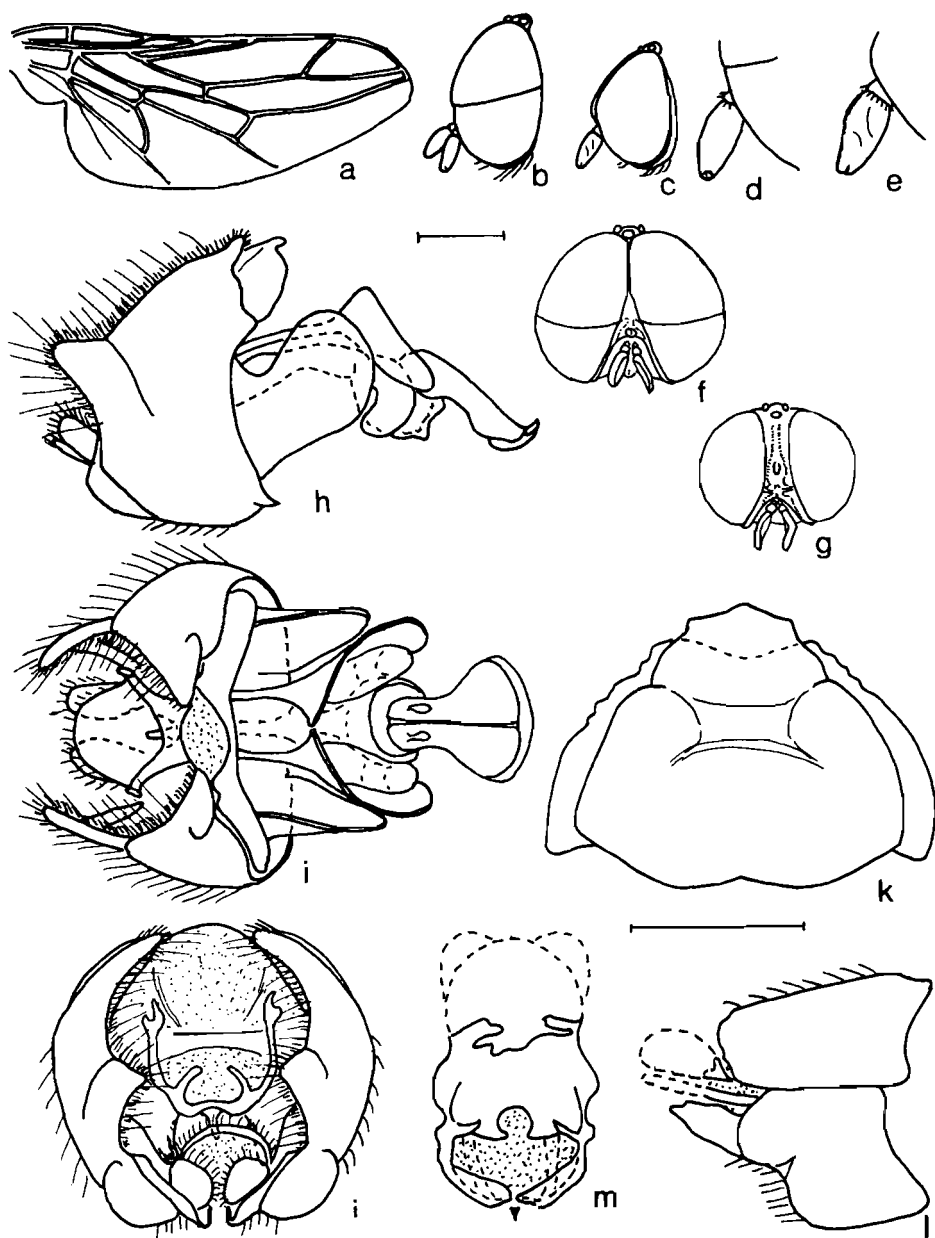


Fig. 12. *Scenopinus inquilinus* Séguy, male and female.

a. wing, b. c. lateral aspects of male and female heads, d. e. enlarged details of male and female antennae, f. g. frontal aspects of male and female heads, h. i. j. lateral, ventral and posterior aspects of male terminalia, k. ventral aspect of female 8th sternum, l. lateral aspect of female 8th segment (destroyed portions indicated by dashed lines), m. roof of bursa (destroyed portion of 9th sternum indicated by dashed lines).

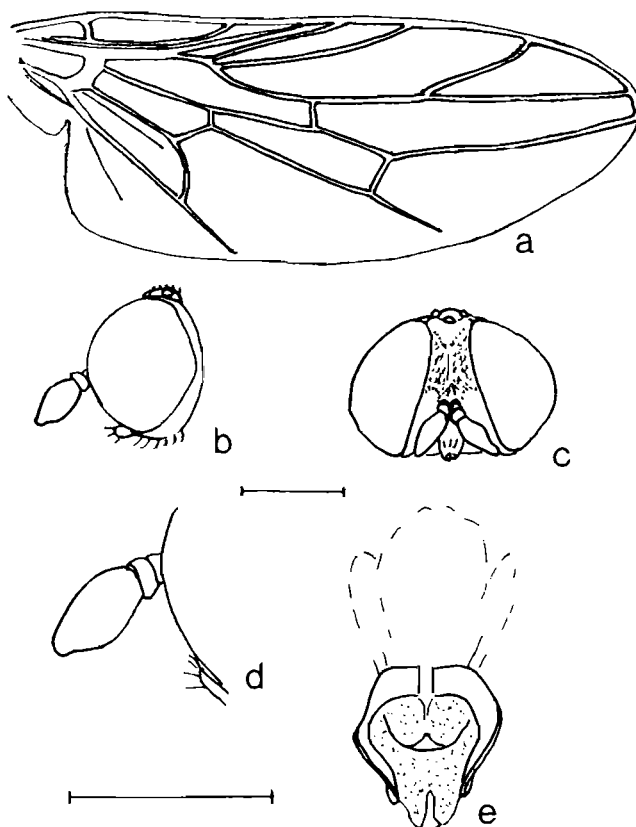


Fig. 13. *Scenopinus katbergi* Kelsey, female.

a. wing, b. lateral aspect of head, c. frontal aspect of head, d. enlarged detail of antenna, e. roof of bursa (9th segment sternum indicated by dashed lines).

Length: Female body 4,3 mm, wing 3,4 mm.

Type locality: Katberg, E. Cape Province, South Africa, 1 200 m, December 1932 (R. E. Turner).

Holotype: Deposited in British Museum (Natural History).

14. *Scenopinus keiseri* Kelsey (Figure 14)

Scenopinus keiseri Kelsey 1969. *Bull. U.S. Nat. Mus.* 277: 74.

Female: Head black; eyes black-brown, extending to back of head so only the narrowest postocular ridge is formed; frons rugose, depressed above antennae and the swelling, with a pit in center one third distance from antenna to median ocellus, and the median portion raised above eye margin; antennae with first segment brown; second segment orange-brown;

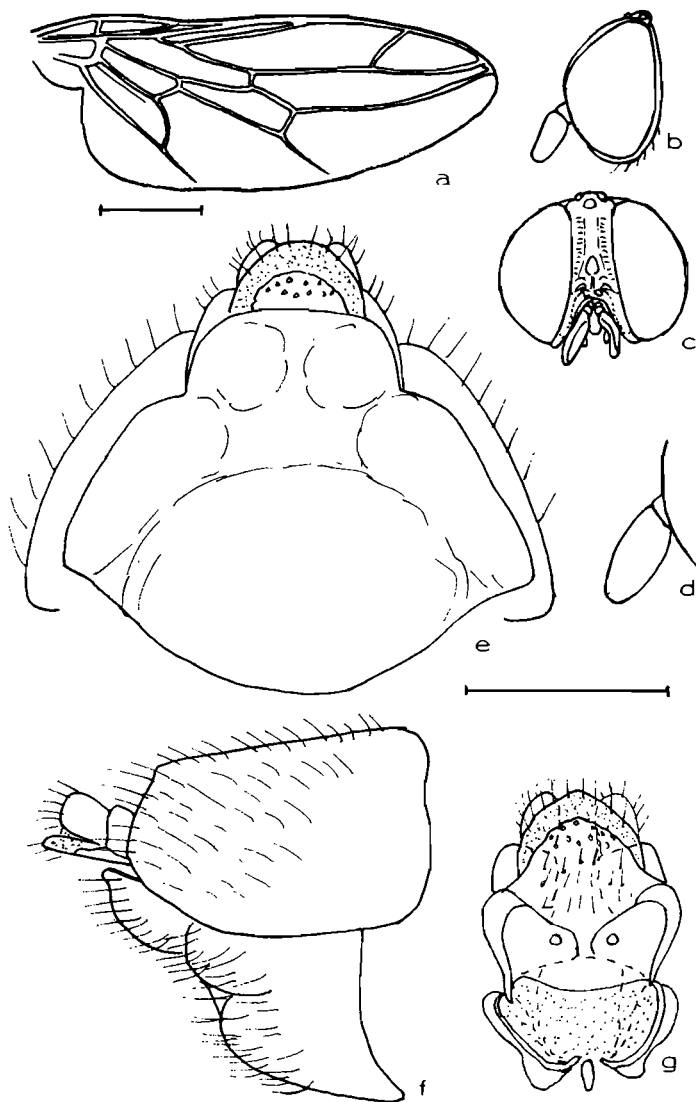


Fig. 14. *Scenopinus keiseri* Kelsey, female.
 a. wing, b. lateral aspect of head, c. frontal aspect of head, d. enlarged detail of antenna, e. ventral aspect of 8th sternum, f. lateral aspect of 8th segment, g. 9th sternum and roof of bursa.

third segment brown, elongate oval; wings brown-fumose; halter stem brown, knob cream to white above and white below. Legs black-brown with orange tarsi, fore tibiae a little lighter; abdomen red-brown.

Male: Unknown.

Length: Female body 3,2–4,4 mm, wing 2,3–2,8 mm.

Type locality: Maroantsetra, Madagascar; Nov 18–19. 1957 (F. Keiser).

Holotype: Naturhistorisches Museum, Basel, Switzerland.

Paratypes: 6 females, same data as types, Naturhistorisches Museum, Basel; 1 female, same data as type in U.S. National Museum; 2 females, Perinet, Madagascar, December 1955 (B. Stuckenberg), in Natal Museum.

15. *Scenopinus madagascariensis* Enderlein
(Figure 15)

Scenopinus madagascariensis Enderlein 1934. *Dipterologica*, 1. *Ges. Naturf. Freunde, Berlin, Setzb.* **193**: 429.

Female: This species is most conspicuous on the basis of its light color and heavy dusting of yellow-brown pollen; third antennal segment pear-shaped, split at tip, orange basally darkening to black-brown distally; wings brownish hyaline; halter stem cream, knob brown above cream below; posterior margin of 8th sternum grooved.

Male: Unknown.

Length: Body 2,6 mm, wing 2,3 mm.

Type locality: Madagascar, Diego-Suarez (S. V. Fredericks).

Type deposited in Deutsches Entomologisches Institut, Berlin.

16. *Scenopinus oldenbergi* (Kröber)
(Figure 16)

Omphrale oldenbergi Kröber 1913. *Ann. Mus. nat. Hung.* **11**: 190.

It is the opinion of the author, based on the short pear-shaped third antennal segment and the fact that only the type is known, that this species is not European but is more likely African in origin, and on this basis has included it in this paper.

Female: Overall color dull grey-brown; frons very broad, thickly covered with whitish hairs; wings tinged with grey-brown; cell R_5 very large.

Male: Unknown.

Length: Female body 4 mm, wing 2,2 mm.

Type locality: Berlin, August 3 (? Oldenberg).

Type deposited in Deutsches Entomologisches Institut, Berlin.

17. *Scenopinus palmulapalpus* Kelsey
(Figure 17)

Scenopinus palmulapalpus Kelsey 1969. *Bull. U.S. Nat. Mus.* **277**: 85.

Female: This species is characterized by broadly flattened palpi that are covered with a velvety pile; long orange-brown third antennal segment; brown fumose wings, with cell R_5 narrowing sharply at tip of wing; halter knob red-brown shining; and the deeply notched 8th tergum.

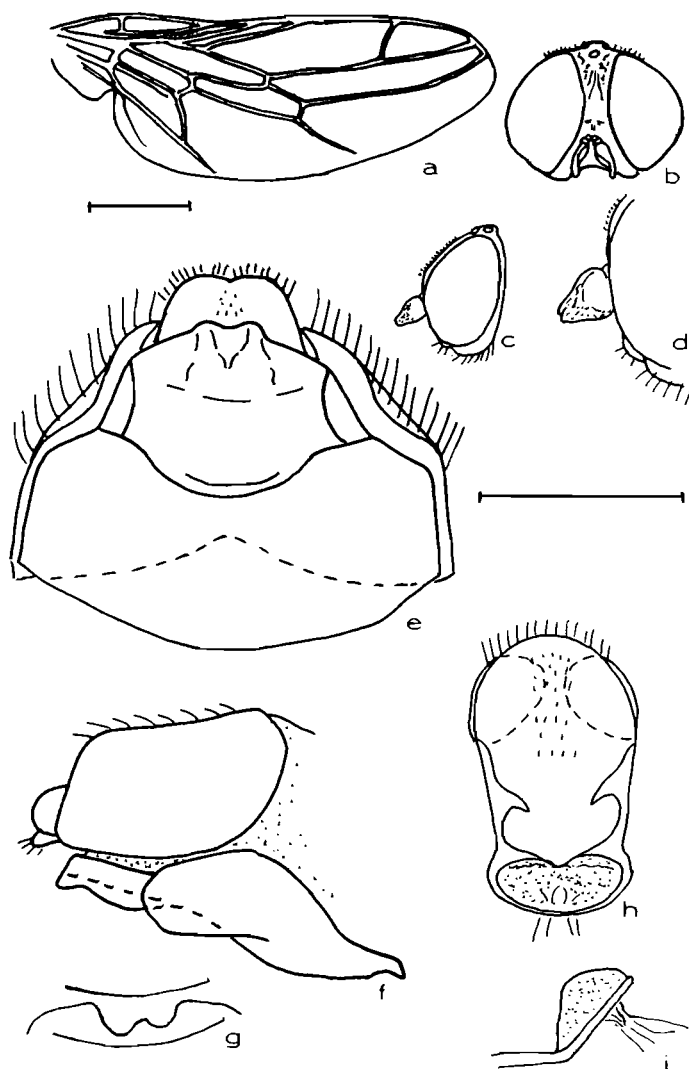


Fig. 15. *Scenopinus madagascariensis* Enderlein, female.

a. wing, b. frontal aspect of head, c. lateral aspect of head, d. enlarged detail of antenna, e. ventral aspect of 8th sternum, f. lateral aspect of 8th segment, g. detail of posterior margin of 8th sternum, h. 9th sternum and roof of bursa, i. sketch showing depression of hind margin of bursa.

Male: Unknown.

Length: Female body 3,4-3,8 mm, wing 2,3-2,7 mm.

Type locality: Pietermaritzburg, Natal, April 2, 1918 (Hardenberg).

Holotype: Female deposited in Natal Museum, Pietermaritzburg.

Paratypes: 2 females, Pietermaritzburg, November 17, 1952 (B. Stuckenberg), February 16, 1956 (B. Stuckenberg), in Natal Museum; 1 female, Pietermaritzburg, Novem-

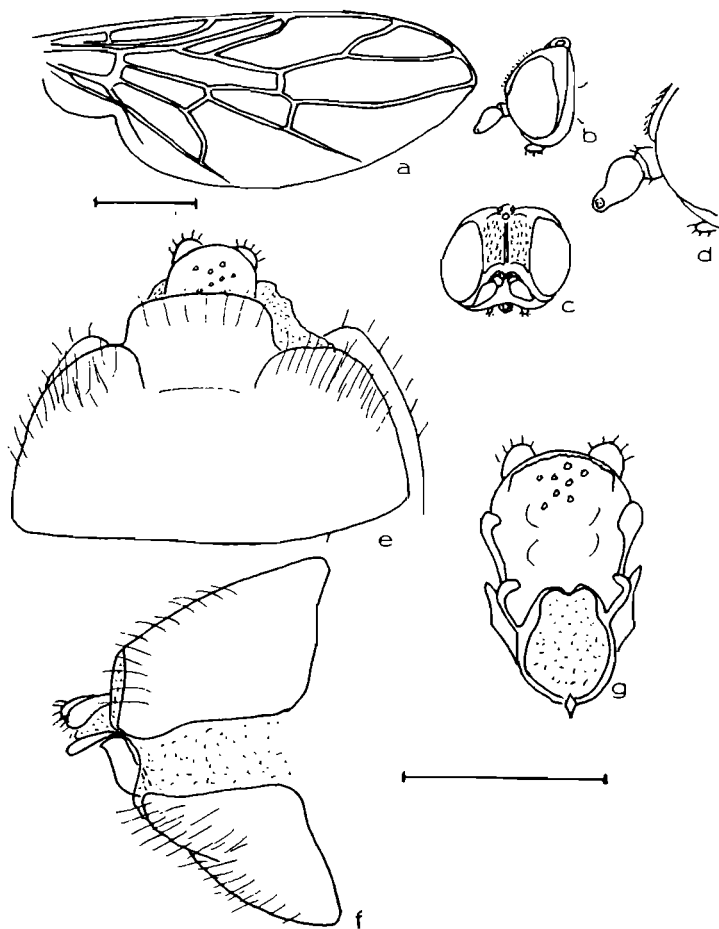


Fig. 16. *Scenopinus oldenbergi* (Kröber), female.
 a. wing, b. lateral aspect of head, c. frontal aspect of head, d. enlarged
 detail of antenna, e. ventral aspect of 8th sternum, f. lateral aspect of
 8th sternum, g. 9th sternum and roof of bursa.

ber 16, 1954 (B. Stuckenberg), in U.S. National Museum, Washington, D.C.
 Brevicornis Group

18. *Scenopinus fryeri* Kelsey
 (Figure 18)

Scenopinus fryeri Kelsey 1969. *Bull. U.S. Nat. Mus.* 277: 97.
Syn. longiventris Lamb (not Kröber) 1922. *Trans. Linn. Soc. London* 18: 362.

Female: Antennae with basal segments red-brown, third black-brown, pear-shaped and covered with a pile of golden hairs; wing smoky brown; halter stem brown, knob tan; abdomen with 8th sternum exceeding the tergum. 9th tergum with short spines.

Male: Unknown.

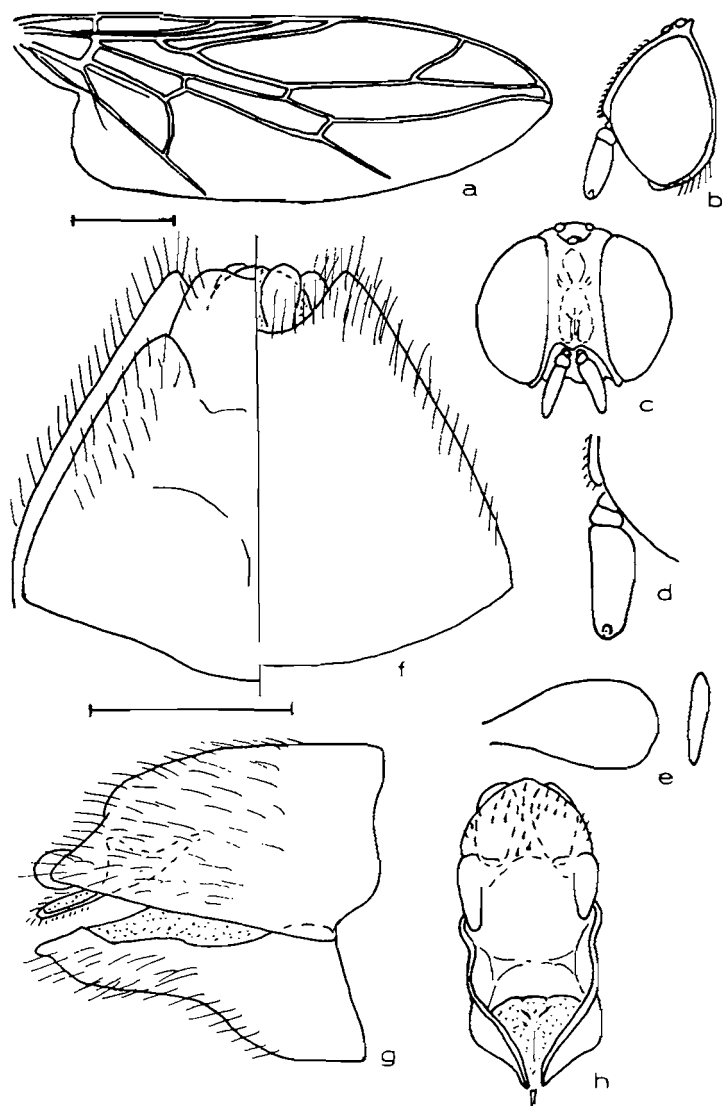


Fig. 17. *Scenopinus palmulapalpus* Kelsey, female.

a. wing, b. lateral aspect of head, c. frontal aspect of head, d. enlarged detail of antenna, e. sketch of palpus, lateral and cross section, f. ventral aspect of 8th sternum (left) and dorsal aspect of 8th tergum (right), g. lateral aspect of 8th segment, h. 9th sternum and roof of bursa.

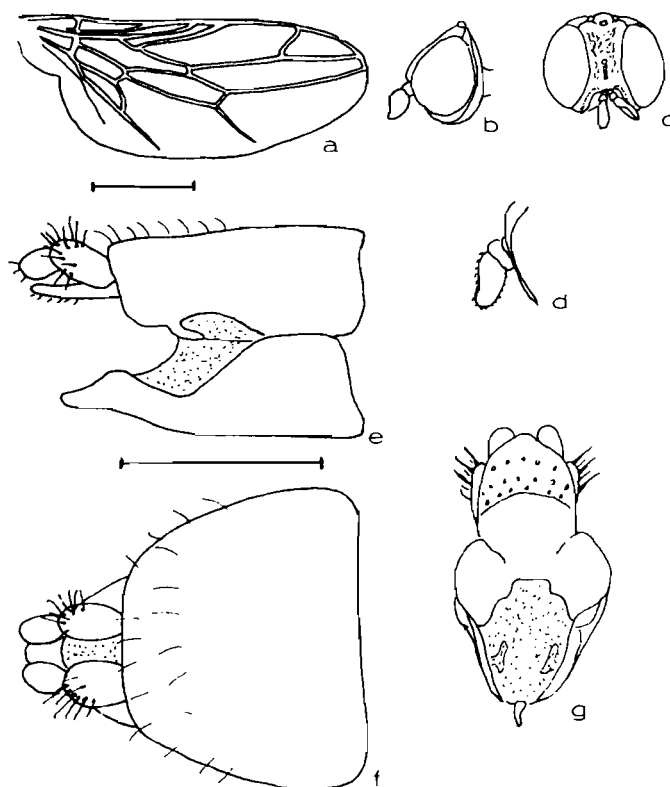


Fig. 18. *Scenopinus fryeri* Kelsey, female.

a. wing, b. lateral aspect of head, c. frontal aspect of head, d. enlarged detail of antenna, e. lateral aspect of 8th and 9th segments, f. dorsal aspect of 8th and 9th segments, g. 9th sternum and roof of bursa.

Length: Female body 2,7 mm, wing 2,0 mm.

Type locality: Aldabra Island, 1908-1909 (J. C. Fryer).

Holotype: Female deposited in British Museum (Natural History), London.

19. *Scenopinus lincinus* Kelsey
(Figure 19)

Scenopinus lincinus Kelsey 1969. *Bull. U.S. Nat. Mus.* 277: 99.

Female: Frons broad, subshining, with a median dimple; antennae black-brown, third segment pear-shaped; wings smoky brown, veins R_5 and M_{1+2} both curving forward to end before the tip of the wing; halter stem brown, knob tan; 8th sternum slightly longer than tergum, 9th tergum with many coarse spines.

Male: Unknown.

Length: Female body 3 mm, wing 1,8 mm.

Type locality: Ambohitantely, Madagascar, June 8, 1959 (F. Keiser).

Holotype: Female deposited in Naturhistorisches Museum, Basel.

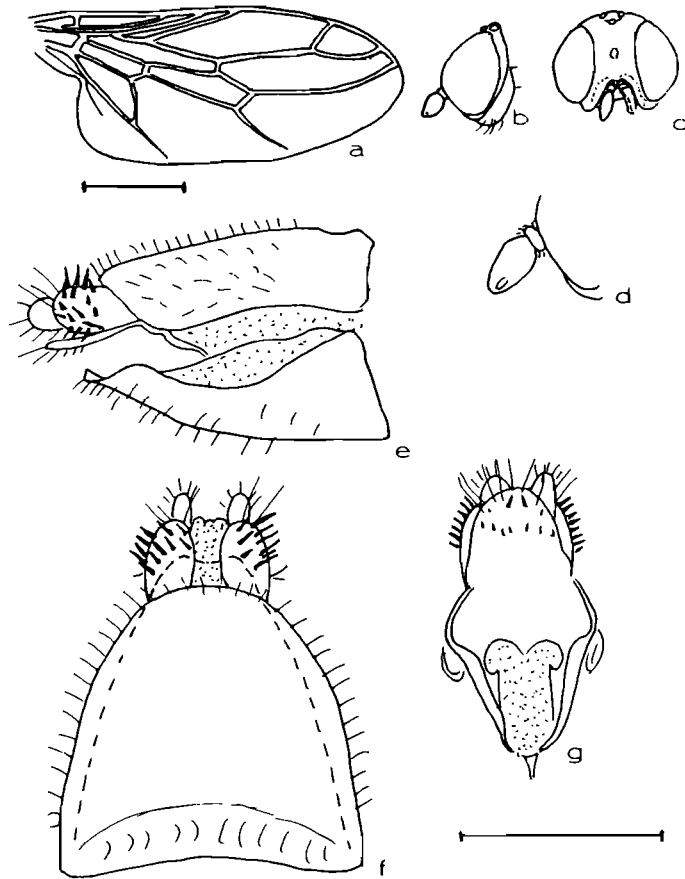


Fig. 19. *Scenopinus lincinns* Kelsey, female.

a. wing, b. lateral aspect of head, c. frontal aspect of head, d. enlarged detail of antenna, e. lateral aspect of 8th and 9th segments, f. dorsal aspect of 8th and 9th segments, g. 9th sternum and roof of bursa.

20. *Scenopinus minusculus* (Séguy)

(Figure 20)

Omphrale minusculus Séguy 1934. *Encycl. Ent. Ser. B. Diptera* 7: 74.

Syn. longiventris Lamb (not Kröber) 1922, *Trans. Linn. Soc. London* 18: 362.

Male: This small fly is typical of members of the group. Frons rugose, with flat slightly elevated shining ridge; last antennal segment covered with short hairs; wings milky white; halter knob white; abdomen with three white bands; terminalia as figured.

Female: Frons broad, shining, with a central depression; antenna, wings and halter as in male; abdomen with 8th sternum cleft on posterior margin, 9th tergum without spines. Length: Male body 1,5 mm, wing 1,5 mm; female body 2,7 mm, wing 1,9 mm.

Type locality: Maromandia, prov. d'Analaleva, Madagascar, 1921 (R. Decary).

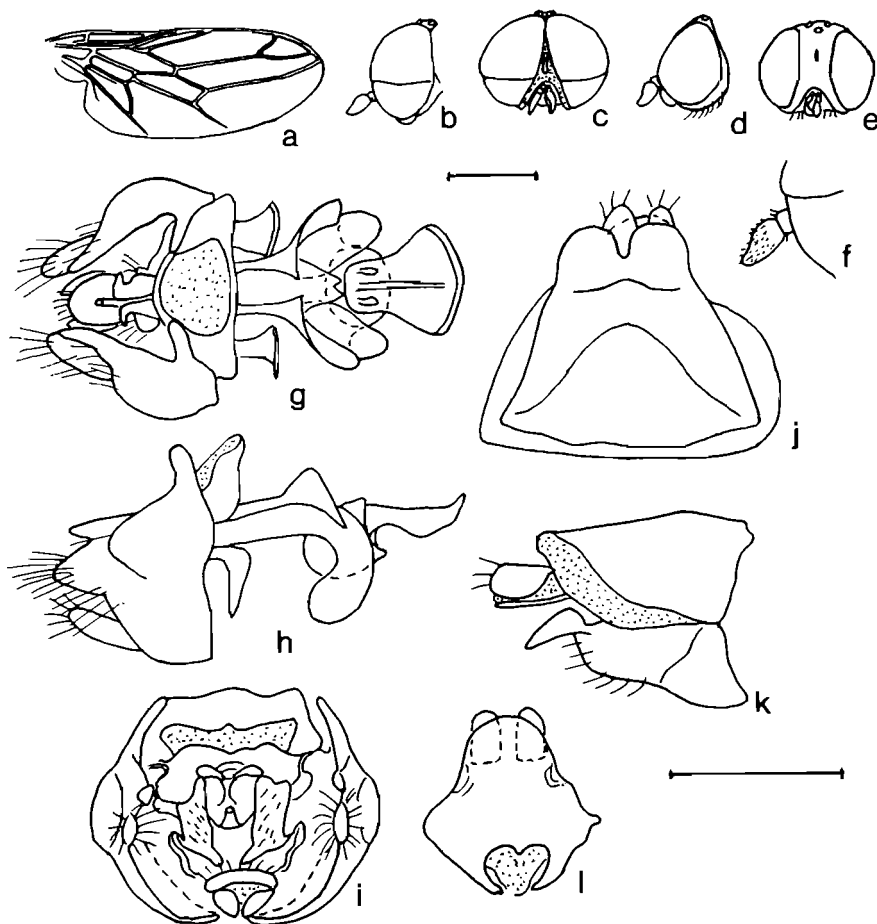


Fig. 20. *Scenopinus minusculus* (Séguy), male and female.

a. wing, b. c. lateral and frontal aspects of male head, d. e. lateral and frontal aspects of female head, f. enlarged detail of antenna, g. h. i. ventral, lateral and posterior aspects of male terminalia, j. ventral aspect of female 8th sternum, k. lateral aspect of female 8th and 9th segments, l. 9th sternum and roof of bursa.

Type deposited in Muséum d'Histoire Naturelle, Paris.

Female description based on female, Bekily, Reg. sud de l'Ile, September 1926 (A. Seyrig) in Muséum National d'Histoire Naturelle, Paris.

Also examined: 1 male, Aldabra Island (J. C. Fryer), in British Museum (Natural History), London.

21. *Scenopinus reduncus* Kelsey

(Figure 21)

Scenopinus reduncus Kelsey 1969. *Bull. U.S. Nat. Mus.* 277: 106.

Female: This species is most easily identified by the wing venation, cell R_5 being sharply narrowed at the tip of the wing, and by the shape of the bursal cavity. Frons broad,

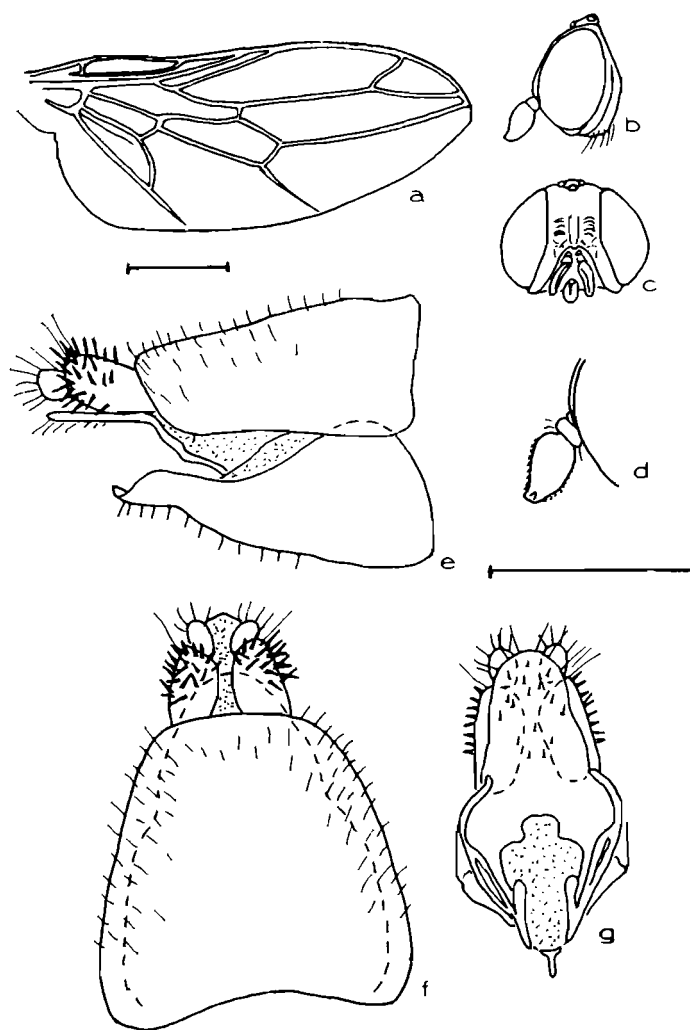


Fig. 21. *Scenopinus reduncus* Kelsey, female.

a. wing, b. lateral aspect of head, c. frontal aspect of head, d. enlarged detail of antenna, e. lateral aspect of 8th and 9th segments, f. dorsal aspect of 8th and 9th segments (8th sternum outline), g. 9th sternum and roof of bursa.

subshining, with a median depression on lower half; wings smoky brown; halter with stem tan, knob tan, velvety above, white below.

Male: Unknown.

Length: Female body 3,4 mm, wing 2,5 mm.

Type locality: Ambohitantely, Madagascar, June 8, 1958 (F. Keiser).

Holotype: Female deposited in Naturhistorisches Museum, Basel.

22. *Scenopinus stuckenbergi* new species
(Figure 22)

This new species from South Africa with cell R_5 parallel-sided, the proximally closed 9th tergum of the male and the elongate sternum of the female, further confirms the author's concepts on the subgroups of the genus *Scenopinus*. He takes great pleasure in naming it after the Stuckenbergs who have provided so many interesting specimens for study.

Male: Head black; eyes red-brown above, black below, extending around the back of the head dorsally; frons triangular, shining, nearly divided by the dorsal extension of the bands of silvery pile laterad of the oral opening on to the lower third of the frons; ocellar tubercle black, ocelli orange-brown; mouthparts black-brown, well developed, nearly filling the oral cavity; palpi black-brown, half the length of oral opening; antennae with the first segment red-brown, short; second orange-brown, third segment dark red-brown with short hairs that glint golden, oval, widest at middle; see figures.

Thorax black, granular; humeral callus with a cream tip, supra-alar callus brown; pleural areas black-brown; wing white, veins yellow-brown anteriorly to white posteriorly; veins R_5 and M_{1+2} parallel; halter stem brown, knob white; legs with femora dark red-brown, tibiae red-brown, tarsi orange-brown darkening distally.

Abdomen black-brown very short; segments 3–5 bordered with white that appears as a single band dorsally but shows segmentation laterally; terminalia black-brown. See figures for details.

Female: Head black; eyes red-brown with very narrow post ocular flange; frons broad, subshining, surface granular slightly swollen in the middle, on ventral half the silvery pile laterad of oral opening extending on to the lower frons above the antennal base; ocellar tubercle black, not set off, ocelli orange-brown; mouthparts as in male, antennae as in male, see figures.

Thorax, as in male, except wings brownish, veins tan; halter stem brown, knob white.

Abdomen dark red-brown, subshining; see figures for details of 8th sternum and bursa.

Length: Male body 1,8 mm, wing 1,6 mm; female body 2,5 mm, wing 1,6 mm.

Type locality: SOUTH AFRICA, Ndumu Reserve, Ingwavuma District, Tongaland December 1–10, 1963 (B. & P. Stuckenberg).

Holotype and Allotype: Male and female, deposited in Natal Museum.

Paratypes: 1 male, 1 female, same data as type in Natal Museum; 1 male, 1 female same data as type deposited in U.S. National Museum, Washington, D.C.

23. *Scenopinus turneri* Kelsey
(Figure 23)

Scenopinus turneri Kelsey 1969. *Bull. U.S. Nat. Mus.* 277: 107.

Male: This species has an elongate triangular frons which is granular with a median shining groove; antennae with basal segments black-brown, third segment red-brown and pear-shaped; thorax dorsum black with short white hairs; wing smoky hyaline; halter stem black-brown, knob red-brown; legs with all segments dark red-brown; abdomen with three wide white bands separated by narrow strips of red-brown; aedeagal parameres long, penis short; see figures.

Female: Unknown.

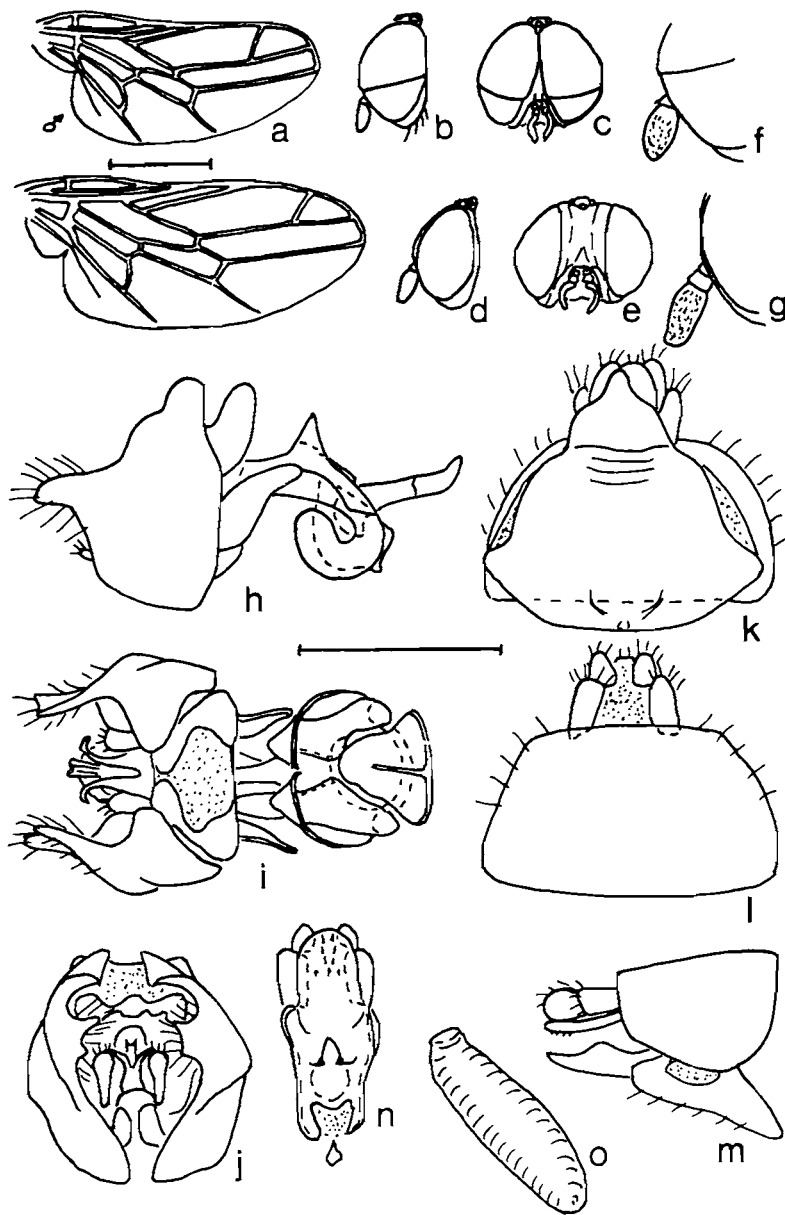


Fig. 22. *Scenopinus stuckenbergi* new species, male and female.

a. wing, b. c. lateral and frontal aspects of male head, d. e. lateral and frontal aspects of female head, f. g. enlarged details of male and female antennae, h. i. j. lateral, ventral and posterior aspects of male terminalia, k. ventral aspect of female 8th sternum, l. dorsal aspect of female 8th and 9th tergites, m. lateral aspect of female 9th and 8th segments, n. 9th sternum and roof of bursa, o. accessory gland (probably the spermatheca).

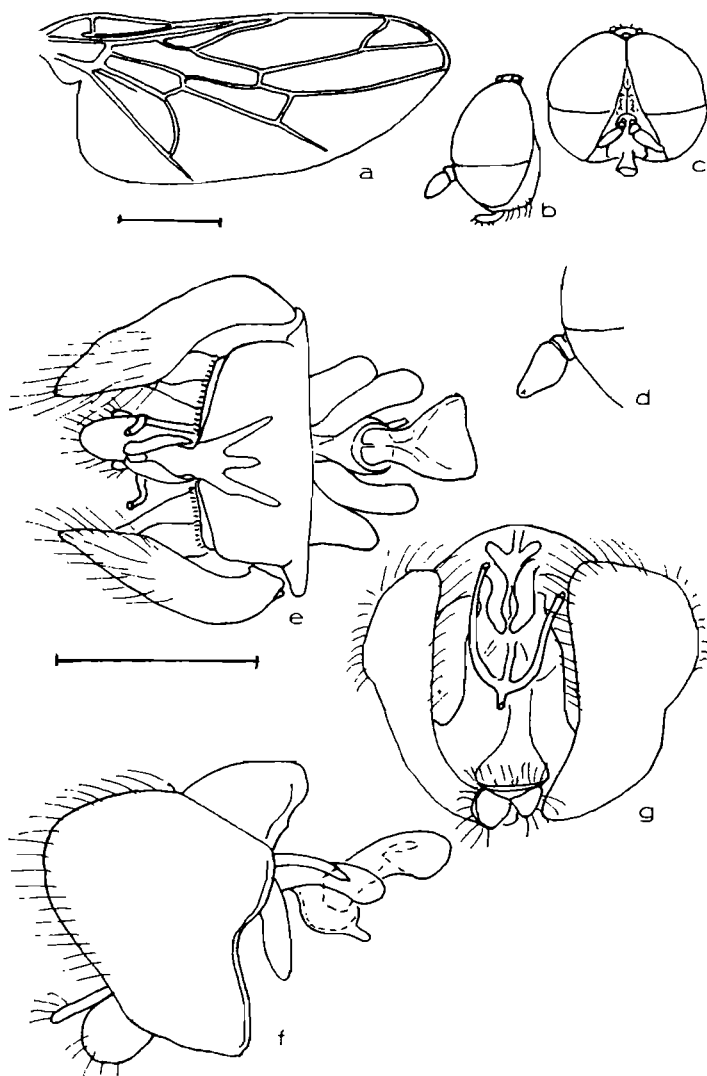


Fig. 23. *Scenopinus turneri* Kelsey, male.

a. wing, b. c. lateral and frontal aspect of head, d. enlarged detail of antenna, e, f. g. ventral, lateral, and posterior aspects of terminalia.

Length: Male body 2,8 mm, wing 2,2 mm.

Type locality: Aliwal North, Cape Province, South Africa, December 1922 (R. E. Turner).

Holotype: Male deposited in British Museum (Natural History).

Genus *Metatrichia* Coquillett24. *Metatrichia lophrysoma* (Speiser)
(Figure 24)

Pseudomphrale lophrysoma Speiser, 1920. *Zool. Jahresb.* **43**: 216.

This is the largest of all the Scenopinids seen by the author.

Female: The frons is very broad and covered with short hairs except for the median portion; antennae black-brown, oval; wings greyish; halter with knob cream.

Male: Unknown.

Length: Female body 7–7,5 mm, wing 5,5 mm.

Type locality: Willowmore, S. Africa. November 1907 (H. Brauns).

Type deposited in Stettiner Museum (now housed in the Polish Academy of Sciences, Warsaw), lost.

Material examined: 2 females, Banana Congo (Cameroons), 6°S, 12°20'E, July 1915 (Lang and Chapin), housed in American Museum of Natural History, New York.

25. *Metatrichia stevensoni* (Bezzi)
(Figure 25)

Pseudomphrale stevensoni Bezzi 1925. *Encycl. Entomol. Ser. B., Diptera* **2**, p. 96.
Syn. *Pseudomphrale africana* Lindner 1962. *Stuttgarter Beitr. Nat.* **83**, p. 2.

This large robust fly is characterized by the closed cell R_5 .

Male: The male is characterized by the markings on the dorsum of the abdomen which consist of antero-lateral swellings of the posterior white margins of the abdominal tergites. The antennae are yellow and pointed; the wings clear; and the halter knob white.

Female: The female has a broad frons with anteriorly directed silvery scales on a black base, the third antennal segment orange at the base, black at tip and truncated. Thorax with a pile of narrow scales; wing brownish; halter stem brown, knob tannish-yellow. Legs red-brown except tarsi orange-yellow.

Length: Male body 5–5,5 mm, wing 3,5–4 mm; female body 4,5 mm, wing 3 mm.

Type locality: Matopos, Rhodesia, September 21, 1924 (R. H. R. Stevenson).

Type: Male deposited in Museo Civico di Storia Naturela, Milan, Italy.

Other material seen: 1 male, Dar-es-Salaam, Kenya, November 18, 1958–May 5, 1959 (Lindner type of *P. africana*) in Staatliches Museum für Naturkunde, Stuttgart, Germany; 1 male, Cholo, Malawi (R. C. Wood); 1 male, Ruw, Malawi, May 13, 1916 (R. C. Wood); 2 females, Aus, S. W. Africa, January 1930 (R. E. Turner), all in British Museum (Natural History), London.

Genus *Propebrevitrichia* Kelsey26. *Propebrevitrichia quadrispina* new species
(Figure 26)

Female: Head orange; eyes black; post ocular ridge swollen, with a few sparse hairs, separated on the midline behind the ocellar tubercle; frons broad, widening dorsally to extend mesad of the eye and ending at a groove extending from eye margin to behind the lateral ocellus; ocellar tubercle black-brown, ocelli orange; mouthparts black-brown,

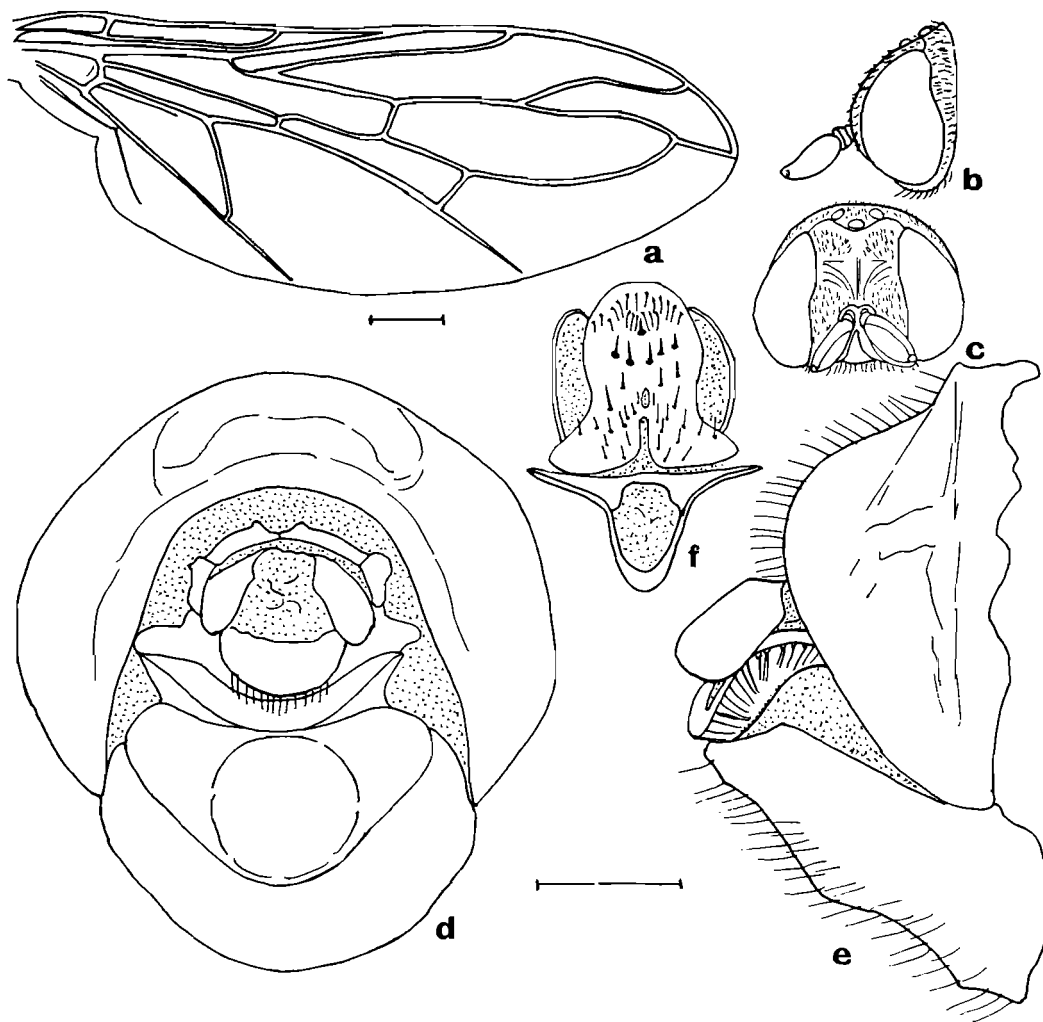


Fig. 24. *Matatrichia lophrysoma* (Speiser), females.

a. wing, b. lateral aspect of head, c. frontal aspect of head, d. posterior aspect of end of abdomen, e. lateral aspect of 8th and 9th segments, f. 9th sternum and roof of bursa.

elongate, the rostrum and labellum equal in length to the thickness of the head, projecting forward to approximately the tips of the antennae; palpi short, tan; antennae black, first two segments short, third segment elongate oval, widest in basal fourth, with a silvery pile.

Thorax with dorsum black-brown dusted with grey and olive pollen, the areas above the humeral callus and lower margins of the tergum orange; humeral and supra-alar calli orange; pleural areas orange with ventral portions of principal sclerites red-brown. Wings smoky brown, veins brown; halter stem brown, knob yellow-brown. Legs black-brown with knees of femora orange.

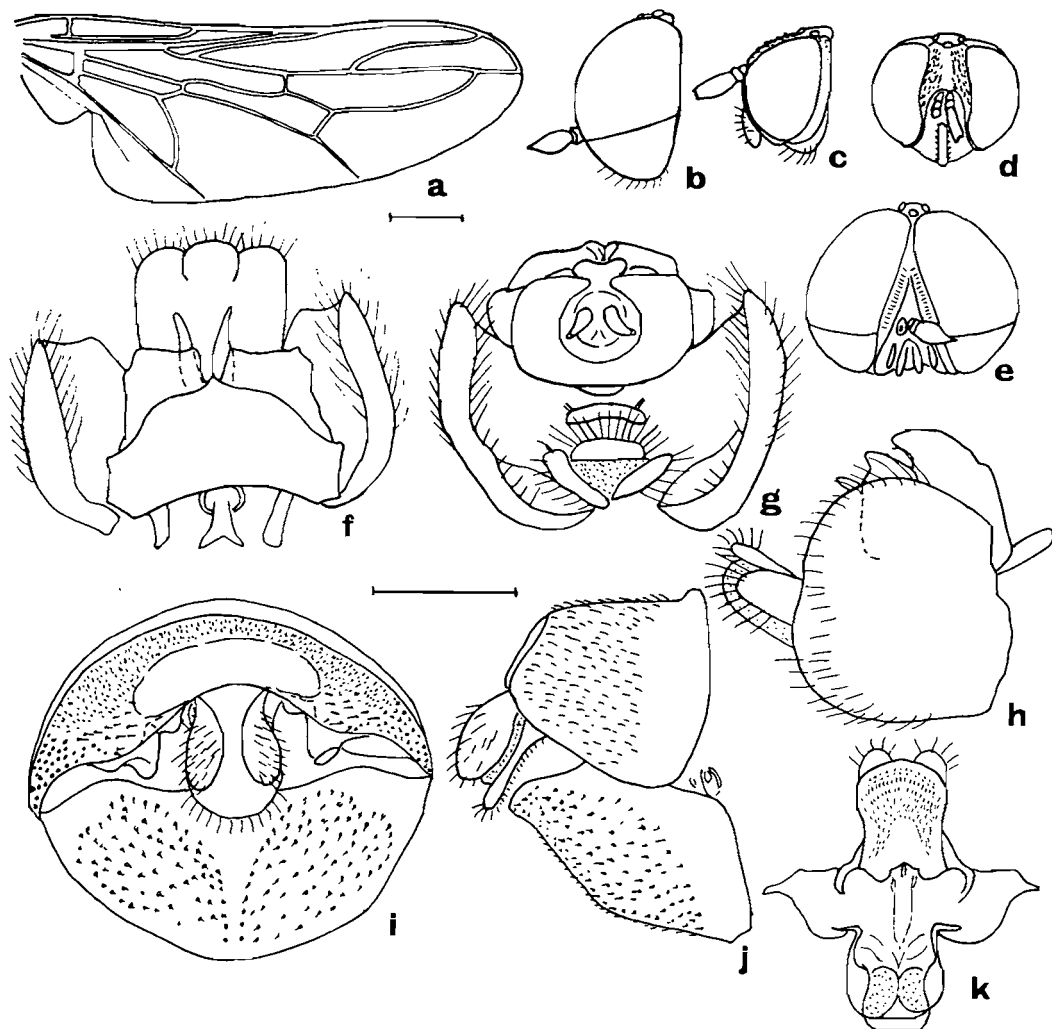


Fig. 25. *Metatrichia stevensoni* (Bezzi), male and female.

a. wing, b. c. lateral aspects of male and female heads, d. e. frontal aspects of female and male heads, f. g. h. ventral posterior and lateral aspects of male terminalia, i. posterior aspect of female abdomen, j. lateral aspect of female 8th and 9th segments, k. 9th sternum and roof of bursa.

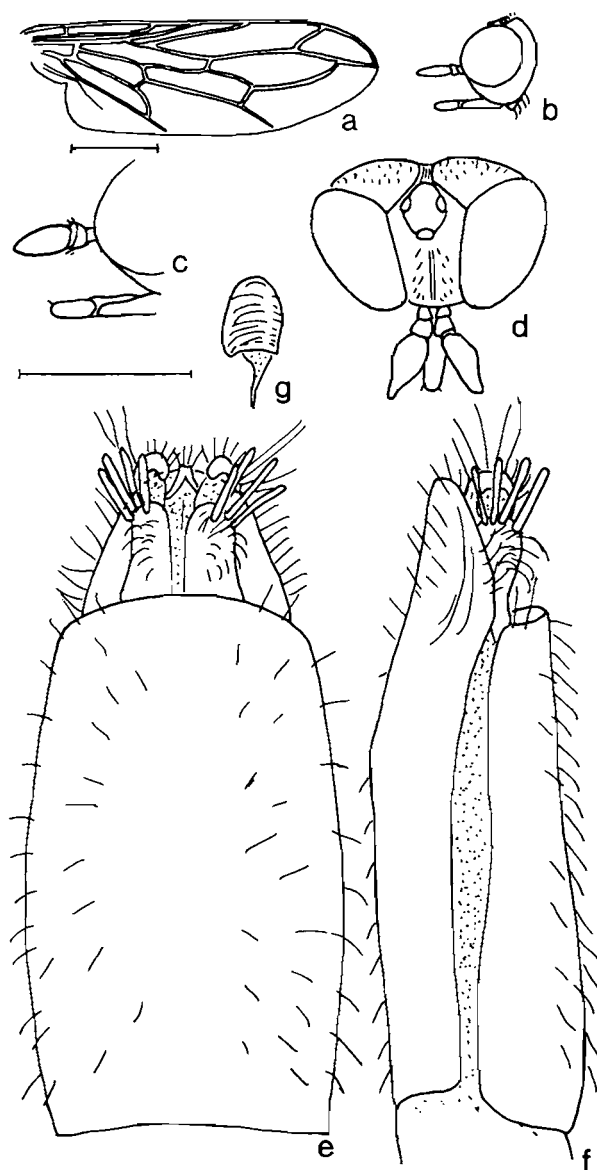


Fig. 26. *Propebrevitrichia quadrispina* new species, female.
 a. wing, b. lateral aspect of head, c. enlarged detail of antenna,
 d. enlarged dorsal aspect of head, e. dorsal aspect of 8th and 9th
 tergites, f. lateral aspect of 8th and 9th segments, g. accessory gland
 (probably the spermatheca).

Abdomen dark red-brown, subshining, very long; 8th sternum dark red-brown, tip beyond tergum yellowish; 9th tergum with 4 black spines.

Male: Unknown.

Length: Female body 4-4,6 mm, wing 2-2,2 mm.

Type locality: SOUTH AFRICA, Knersvlakte, north of Vanrhynsdorp, south-west Cape, October 6-9, 1964 (B. & P. Stuckenberg).

Type: Female deposited in the Natal Museum.

Paratype: Female same data as type in Natal Museum.

27. *Propebrevitrichia stuckenbergi* Kelsey
(Figure 27)

Propebrevitrichia stuckenbergi Kelsey 1969. *Bull. U.S. Nat. Mus.* 277: 283.

Male: Head black-brown dusted with grey pollen; mouthparts long, slender, extending to near tips of antennae; antennae black-brown, third segment pear-shaped with a bifurcated tip; dorsum of thorax dusted with grey pollen; wing milky white; halter stem brown, knob white; abdomen with segments 3-7 with over half of dorsal portion white; side pieces of 9th tergum with basal portion red-brown, remainder white with two dark spots at the mid-portion.

Female: Unknown.

Length: Male body 2,2 mm, wing 1,7 mm.

Type locality: Karoo, at junction of Calvinia-Sutherland roads near Inverdoorn, Ceres District, W. Cape Prov., S. Africa. October 23, 1959 (B. & P. Stuckenberg).

Holotype: Male deposited in Natal Museum.

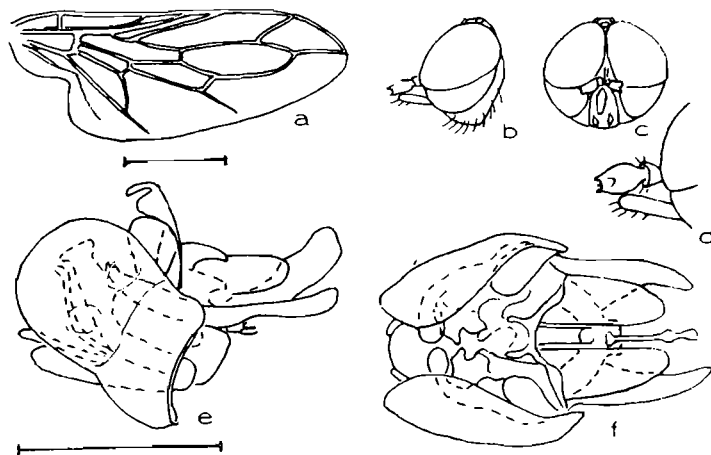


Fig. 27. *Propebrevitrichia stuckenbergi* Kelsey, male.
a. wing, b. lateral aspect of head, c. frontal aspect of head, d. enlarged detail of antenna, e. lateral aspect of terminalia, f. ventral aspect of terminalia.

28. *Propebrevitrichia turneri* Kelsey

(Figure 28)

Propebrevitrichia turneri Kelsey 1969. *Bull. U.S. Nat. Mus.* 277: 284.

Male: Head brown, with light brown scales; mouthparts barely exceeding the oral opening; antennae with basal segments brown, third segment red-brown but latero-basal portion orange, bifurcated at tip, scaled; genae covered with brown scales and long hair. Thorax dorsum covered with golden brown scales; wings smoky; halter stem tan, knob white. Abdomen with second segment red-brown covered with tan scales; third segment half white, segments 4–8 white dorsally, 9th tergum white with basal portion brown, scaled; aedeagal prongs not exceeding side pieces.

Female: Head red-brown; frons broad, swollen, with a median depression between antennae and median ocellus, with a few scattered hairs; mouthparts not exceeding oral opening; antennae as male.

Thorax as in male; abdomen red-brown with tan scales, segments 3–5 with posterior bands of white, 8th segment orange-red subshining with sternum exceeding tergum and pointed, 9th tergum with 3 stiff spines.

Length: Male body 2,5 mm, wing 1,8 mm; female body 2,8 mm, wing 1,9 mm.

Type locality: Mossel Bay, Cape Prov., S. Africa, December 4, 1938 (R. E. Turner).

Holotype: Male deposited in British Museum (Natural History).

Allotype: Female, Mossel Bay, Cape Province, S. Africa, October 20, 1938 (R. E. Turner), in British Museum.

Paratypes: 7 males, 6 females, Mossel Bay, Cape Province, S. Africa, October–December 1938 (R. E. Turner). 1 female, Worcester, Cape Province, S. Africa, December 1933 (R. E. Turner); all in British Museum.

Genus *Prepseudatrichia* Kelsey29. *Prepseudatrichia stenogaster* (Séguy)

(Figure 29)

Scenopinus stenogaster Séguy 1931. *Bull. Mus. Hist. nat. Paris* 3: 114.

Female: Head black, longer than high; antennae with third segment orange; thorax dorso-ventrally compressed; wing hyaline (like *Scenopinus*), cell R_5 open reaching the edge of the wing; halter with knob mahogany-brown.

Abdomen long, slender; 8th segment elongate, the sternum exceeding the tergum.

Male: Unknown.

Type locality: Nova Choupanga pres Chemba, Zambezi, Mozambique, July 1929 (P. Lesne), collected as a larva from the trunk of *Sterculia*, pupated July 6, emerged mid-July.

Type: Female deposited in Muséum National d'Histoire Naturelle, Paris.

The male terminalia of *P. mateui* Kelsey, a species that occurs in the Sahara area of North Africa, are included (Figure 30) to illustrate the males of this genus.

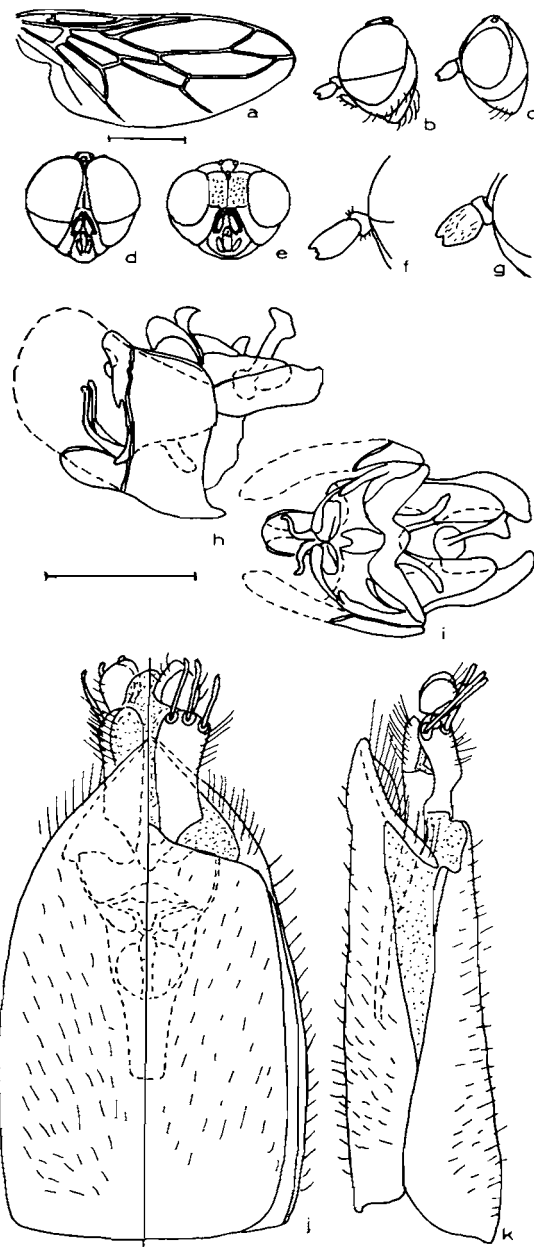


Fig. 28. *Propebrevitrichia turneri* Kelsey, male and female.

a. wing, b. c. lateral aspects of male and female heads, d. e. frontal aspects of male and female heads, f. g. enlarged details of male and female antennae, h. i. lateral and ventral aspects of male terminalia, missing parts indicated by dashes, j. ventral (left) and dorsal (right) aspects of female 8th and 9th segments (bursa indicated by dashes), k. lateral aspect of female 8th and 9th segments.

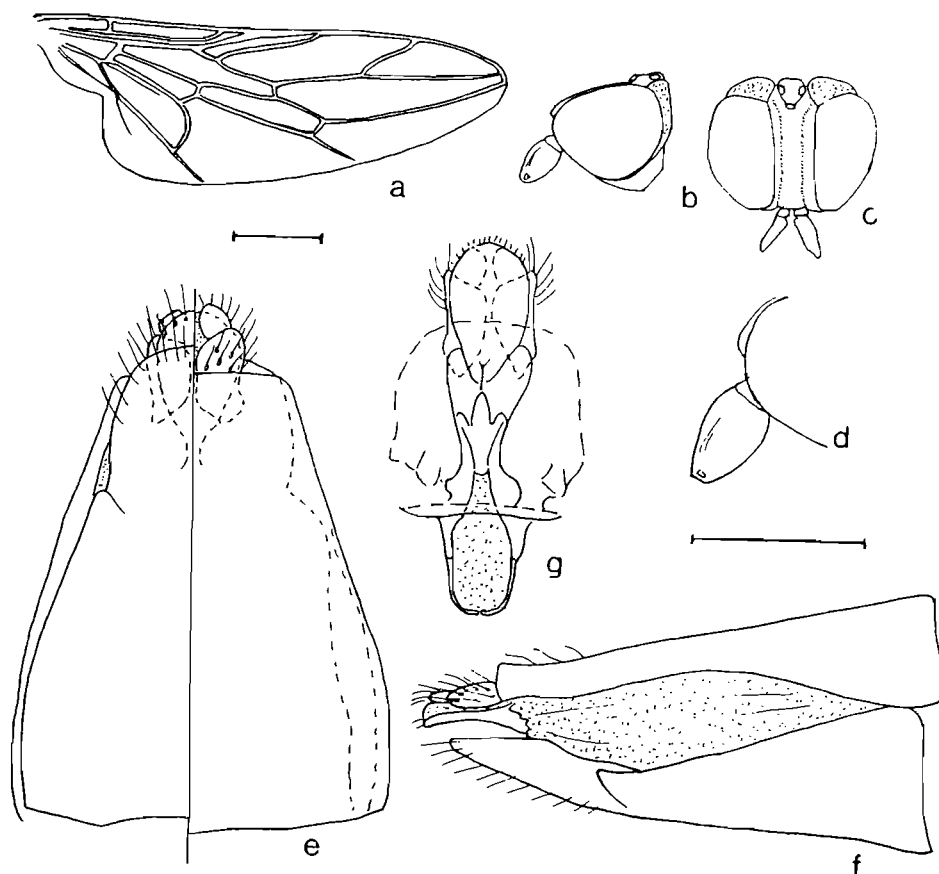


Fig. 29. *Prepseudatrachia stenogaster* (Séguy), female.

a. wing, b. lateral aspect of head, c. dorsal aspect of head, d. enlarged detail of antenna, e. ventral (left) and dorsal (right) aspects of 8th and 9th sternites and tergites, f. lateral aspect of 8th and 9th segments, g. 9th sternum and roof of bursa (floor of bursa indicated by dashed lines).

Genus *Seguyella* Kelsey

30. *Seguyella galactica* (Séguy)

(Figure 31)

Omphrale galactica Séguy 1938. *Mem. Mus. Hist. nat. Paris*, ns. 8: 334.

Male: The body is thick, compact; integument black covered with a light pilosity of whitish hairs among which are mixed long hairs; third antennal segment oval, notched at tip; the wing is characteristic of the genus, with cell R_5 widely open at the edge of the wing, vein M_{1+2} ending well behind the wing tip and vein $M_3 + Cu_1$ ending just beyond the m crossvein; halter long, dark-brown; legs yellowish; abdomen with segments 3–7 white, 9th tergum black, pointed, 10th sternum broadly flaring.

Female: Unknown.

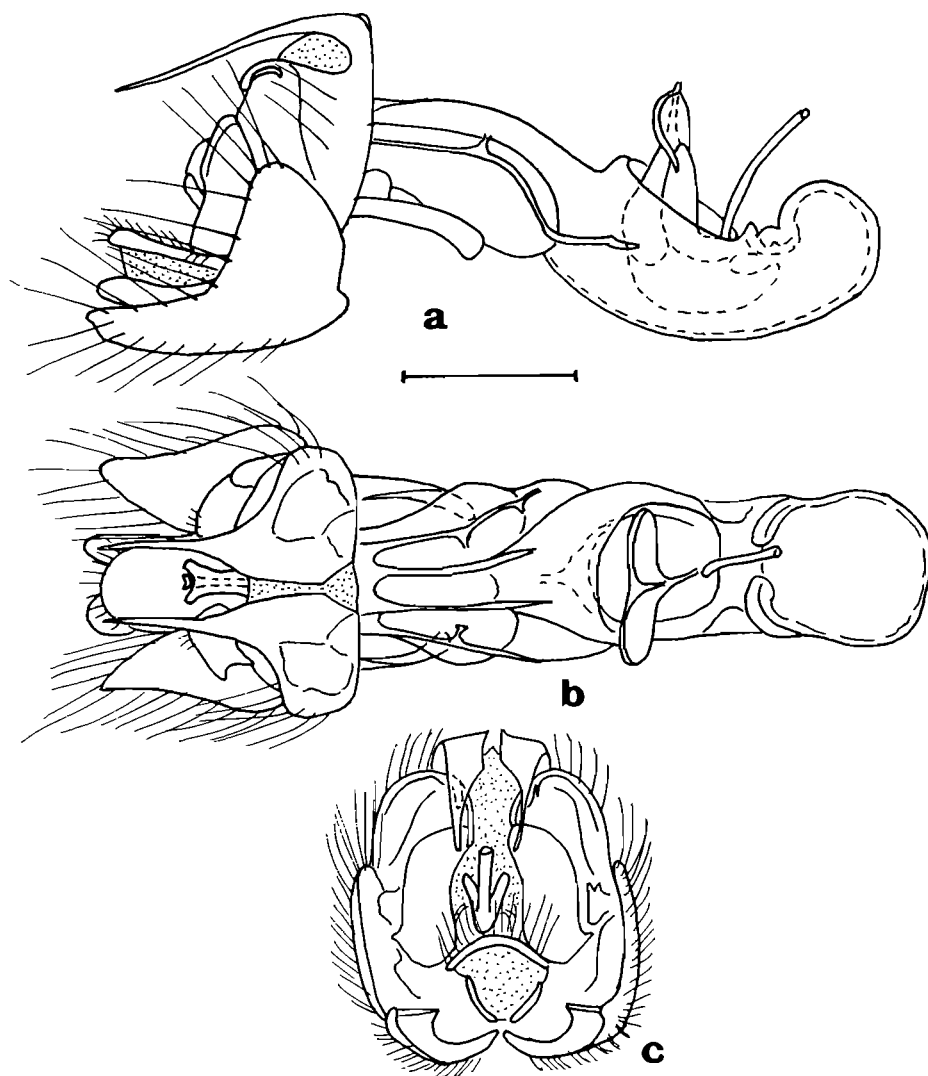


Fig. 30. *Prepseudotrichia mateui* Kelsey, male.

a. b. c. lateral, ventral and posterior aspects of male terminalia to illustrate the males of this genus.

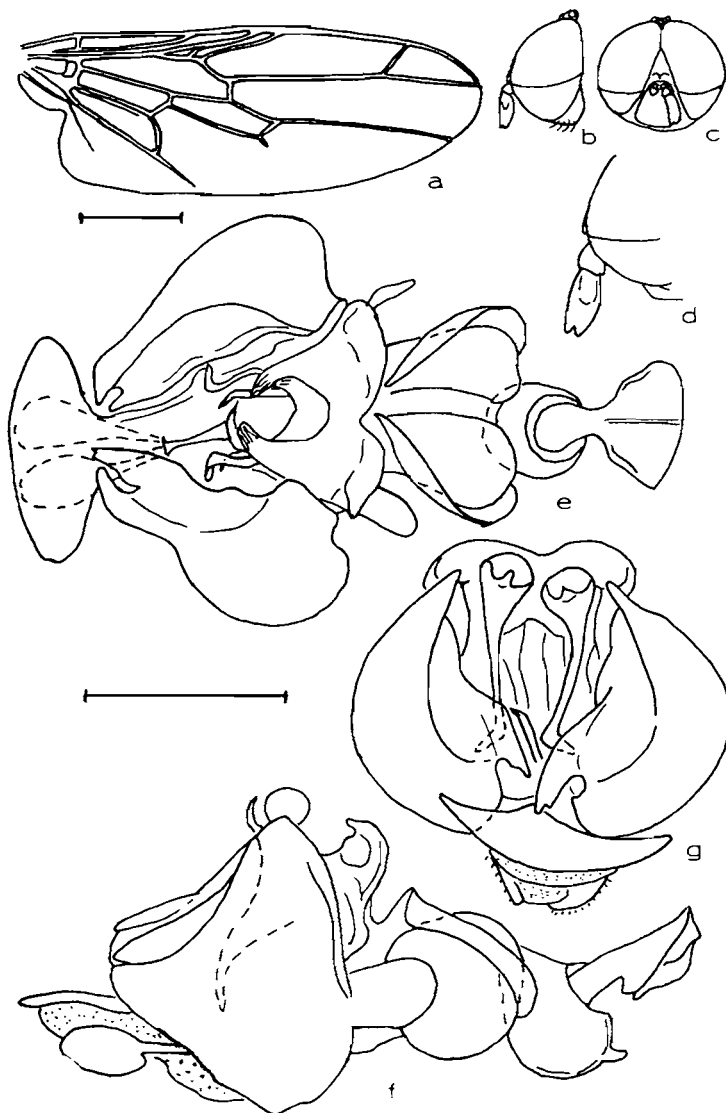


Fig. 31. *Seguyella glactica* (Séguy), male.

a. wing, b. lateral aspect of head, c. frontal aspect of head, d. enlarged detail of antenna, e. f. g. ventral, lateral and posterior aspects of terminalia.

Length: Male body 1,8 mm, wing 2,2 mm.

Type locality: Elgon Saw Mill, Camp 11 on the east slope, Mt. Elgon, 2 470 m, Kenya (C. Aranbourg, P. A. Chappius and R. Jeannel).

Type: Male deposited Muséum National d'Histoire Naturelle, Paris.

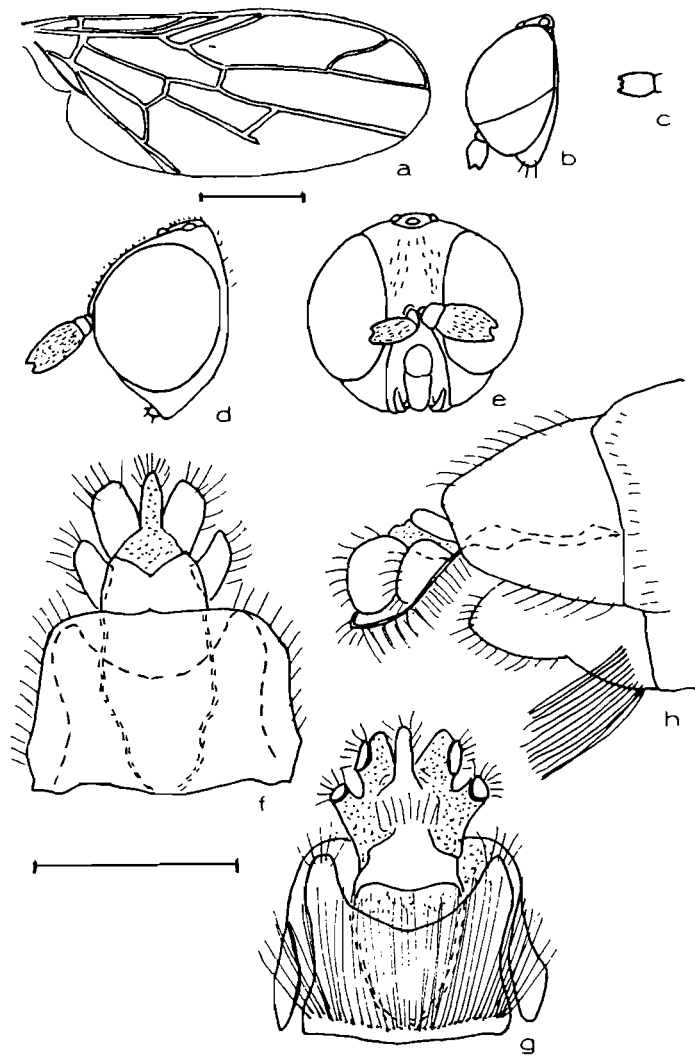


Fig. 32. *Seguyella turneri* Kelsey, male and female.

a. wing, b. enlarged lateral aspect of male head, c. detail of male antenna, d. e. enlarged lateral and frontal aspects of female head, f. dorsal aspect of female 8th and 9th tergites, g. ventral aspects of female 8th and 9th sternites, h. lateral aspect of female 8th and 9th segments.

31. *Seguyella turneri* Kelsey

(Figure 32)

Seguyella turneri Kelsey 1969. *Bull. U.S. Nat. Mus.* 227: 296.

Female: Head orange-brown; frons broad, shining; antennae red-brown, third segment bifurcated and covered with short hairs; thorax red-brown pollinose; wings smoky brown, veins normal for the genus; halter stem orange-brown, knob tan, pollinose; legs light red-brown, abdomen red-brown and granular, 8th tergum and sternum subequal, sternum with a basal band of long hairs, 9th tergum 4-lobed drooping, see figures.

Male: Very small; head black-brown; antennae with basal segments red-brown, third segment dark red-brown, swollen basally, bifurcated at tip; wing hyaline; halter stem red-brown, knob red-brown, shining above, cream below, very round; abdomen with second segment red, segments 3-6 broadly banded with white (4 bands), 9th segment red-brown.

Terminalia lost on dissection so could not be illustrated.

Length: Male body 1,25 mm, wing 1,1 mm; female body 2,5 mm, wing 2 mm.

Type locality: Mossel Bay, Cape Province, S. Africa, January 1922 (R. E. Turner).

Holotype: Female deposited in British Museum (Natural History).

Allotype: Male same data.

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